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MARGARET ANN JAMIESON

Date of Birth — Date de naissance

SEPT. 8, 1948

Country of Birth — Lieu de naissance

CANADA

Permanent Address — Résidence fixe

1027 STRATHCONA DR.
SHERWOOD PARK, ALTA T8A 1A5

Title of Thesis — Titre de la thèse

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Name of Supervisor — Nom du directeur de thèse

DR. L. STEWIN

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THE IMMIGRANT CHILD AND ADJUSTMENT TO LEARNING IN A SECOND CULTURE

by

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A THESIS
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PERMANENT ADDRESS:

..1027 Strathcona Drive.....

..Sherwood Park, Alberta.....

..T8A 1A5.....

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THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "The Immigrant Child and Adjustment to Learning in a Second Culture," submitted by Margaret Jamieson in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

.....
Supervisor

.....

.....

.....

.....
External Examiner

Date Sept. 24, 1981...

ABSTRACT

Schools in Canada have tended to ignore the unique language and culture of Canada's ethnic-minorities (Lind, 1974); therefore, it was assumed that Canadian schools would be ineffective in meeting the educational needs of its immigrant students of ethnic-minorities. Since Canadian literature on the education of immigrant children was relatively sparse, studies on ethnic-minority students in American classrooms provided the major source of information. The latter investigations have indicated that ethnic-minority students have scored significantly lower than ethnic-majority students on standardized, academic achievement tests (Carter & Segura, 1979). According to Bloom (1976), academic differences could have been minimized if teachers considered and incorporated the unique history (cognitive, affective, and social interaction) of each of their students into their teaching practices. Researchers (Hernandez, 1973) have indicated that differences in cognitive, affective, and social behaviors have occurred between ethnic-majority and ethnic-minority students.

The purpose of this descriptive, exploratory study was to examine the adjustment of immigrant students to learning in Canadian schools. Twenty-two children, 11 immigrant

children and 11 Canadian children from three grade 4 classrooms in the Edmonton Separate School System were observed. The observations centered on the critical cognitive, affective, social, and adjustment variables. In addition, questionnaires were administered to the parents and teachers of the immigrant students to determine their attitudes toward the mother culture and the second culture.

Analyses of variance of the cognitive, affective, social, and adjustment variables indicated that there were no significant differences between the two groups. The data from the questionnaires suggested that cultural harmony existed in the homes and schools.

Possible explanations for the findings were discussed. The study was compared with the relevant literature. The implications for education and research were considered. Trends from ad hoc investigations were examined. Suggestions for observational methodology were presented.

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CHAPTER I

INTRODUCTION

Since the first Canadian census in 1871, more than 10 million immigrants have arrived in Canada (Kalbach, 1978). Up until 1896, the migration to the Dominion was slow but steady; then, with the reduction in availability of good agricultural land in the United States and with the offer of free land in the western prairies (Careless, 1970; Creighton, 1972; Dickie, 1962), Canada was swept by a great wave of immigrants. Between 1896 and the first World War approximately 2½ million prople entered the Dominion (Careless, 1970; Creighton, 1972). Most settled on the Canadian prairies, primarily in Alberta and Saskatchewan. In the decade prior to World War I the population increase in Alberta was over 400%, while in Saskatchewan it was nearly 440% (Creighton, 1972). During World War I the number of immigrants entering Canada dropped to about one-third of what it had been (Kalbach, 1978); however, by the end of the war the number immediately rose again. With the depression and World War II, immigration slowed to a low, but increased to a new high in the post-war period. Since World War II, Canada has drawn well over 4 million immigrants from all continents of the world--British from Europe, Vietnamese from Asia, Chileans from South

America, Ugandan Asians from Africa, and Americans from North America to name a few.

Since the opening and settling of the prairies in the early 1900's, there has been a heavy concentration of different ethnic groups in the west. While the majority were from the British Isles, a sizeable number were from Germany, Scandinavia, Russia, Poland, the Ukrain, Austria, and Italy. Thus, when Alberta became a province of Canada in 1905, the population was highly multicultural and multilingual. The composition of the new province's population by ethnic origin was: British 48%, French 6%; and others (Germans, Dutch, Scandinavians, Poles, Russians, Italians, Chinese, etc.) 46%. Over the years these percentages tended to be relatively stable. The 1971 census placed the British at 47%, French at 6%, and others at 47%. Of the others, the percentages ranged from Germans 14%, Ukrainians 8%, Scandinavians 6%, Italians 2%, Russians 1%, and Polish 3%. The result was an ethnic mosaic with the British immigrants forming the largest group but with the other ethnic immigrants together outnumbering the British. In a situation such as this, the society of Canada in general and of Alberta in particular should have reflected its multicultural composition.

Rational for the Study

Studies have indicated that ethnic-minority students

generally have scored significantly lower than ethnic-majority students on standardized tests of academic achievement (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, & York, 1966). These differences have become significant at least by grade 3 and may have stabalized or increased over the many years of schooling (Carter & Segura, 1979; Coleman, et. al., 1966; Dreger & Miller, 1968).

According to Bloom (1976), academic differences could have been minimized if a teacher considered the unique history (cognitive, affective, and social interaction) of each of his/her students and incorporated the knowledge of these histories into his/her teaching strategies and practices.

Reasearchers (Carter & Segura, 1979; Dreger & Miller, 1968; Hernandez, 1973; Ramirez III & Castaneda, 1974) have indicated that behavioral differences do occur between ethnic-minority students and ethnic-majority students. Ethnic-minority students may have displayed unique modes or styles of communication, human-relations, motivation, and learning (Hernandez, 1973; Ramirez III & Castaneda, 1974). Living as an ethnic-minority in a second culture may have resulted in increased feelings of alienation (Cordova, 1970; Hernandez, 1973), poor academic self-concept (Hernandez, 1973; Zirkel, 1971), different teacher expectations or

attitudes (Crowl & MacGinitie, 1974), different teacher-student relationship and interaction (Brophy & Good, 1974; Jackson & Cosca, 1974), and different student-peer relationship (Rist, 1970).

Many of these cognitive, affective, and social factors were critical components of a student's history and should have been considered if an ethnic-minority student was to be educated effectively (Bloom, 1976).

Schools in Canada have tended to promote programs of Canadianization (programs in which the language and culture of the dominant, homogeneous, ethnic group--the white, Anglo-Saxon, English-speaking, middle class--or the Canadian majority was transmitted) and have tended to ignore the unique language and culture of the other ethnic groups, the ethnic-minorities (Lind, 1974; McLeod, 1975; Martin & Macdonell, 1978). As a result, it seemed logical to assume that the Canadian school system would have been ineffective in meeting the educational needs of immigrant students of ethnic-minorities. These students, therefore, would have been at an educational disadvantage when compared to their Canadian majority peers.

Purpose of the Study

The purpose of the study was to explore the adjustment

of immigrant students of ethnic-minorities to learning in Canadian schools. It was assumed that the educational practices in Canada were not geared to meet the unique learning needs of these students. As a result, immigrant students would not have performed as well as their Canadian peers in the various academic areas, and would have felt alienated from school. These immigrant students would not have adjusted effectively to learning in the Canadian or second culture.

In order to explore this contention, 22 children, 11 immigrant children and 11 Canadian children from three grade 4 classrooms from three schools in the Edmonton Separate School System were observed in their respective schools. The observations, which centered on the unique cognitive, affective, social, and adjustment variables, were obtained by administering (a) the vocabulary, reading comprehension, and the two arithmetic subtests of the Canadian Test of Basic Skills (King, 1968), (b) a modified version of Cordova's alienation scale (Cordova, 1968), (c) the verbal expressions subtest of the revised Illinois Test of Psycholinguistic Abilities (Paraskevopoulos & Kirk, 1969), (d) the Bales' Interaction Process Analysis (Bales, 1950; 1970), (e) the McLeish-Martin Coding System (McLeish & Martin, 1975), (f)

the School Situations Picture Stories Technique (Ramirez III & Castaneda, 1974), (g) the Student's Perception of Ability Scale (Boersma & Chapman, 1978a; 1978b), (h) a three-choice, three criteria, sociometric scale (Cohen, 1976; Rushton, 1967), and (i) by counting the frequency of language interference errors, of teacher-student interactions, of teacher-initiated interactions, and of student-peer interactions in the video-taped data. In addition, parent questionnaires were administered to the parents of the immigrant subjects to gather information on parents' attitudes toward the mother culture and school learning in the second culture. Teacher questionnaires were administered to the regular classroom teachers of the immigrant students to gather information on the teachers' attitudes toward their immigrant students. (See Figure 1.)

The results on the cognitive, affective, social, and adjustment observations were analyzed to determine if differences existed between the Canadian and immigrant students. These differences were then related to the adjustment of immigrant children.

Outline of the Study

In Chapter I, the variables of the study were introduced and the importance of the study was established. Chapter II

FIGURE 1

CRITICAL COGNITIVE, AFFECTIVE, AND SOCIAL VARIABLES AND THE ADJUSTMENT OF IMMIGRANT STUDENTS TO LEARNING

English Proficiency — COGNITIVE

Academic self-concept — AFFECTIVE

Achievement-motivational style

Human-relational style

Teacher-student interaction relationship

Peer-student relationship

Teacher attitude toward immigrant students

SOCIAL

Parent attitude to mother culture

Parent attitude to second culture

Academic achievement

ADJUSTMENT TO LEARNING

Alienation

provides a review of the relevant literature. The study definitions and hypotheses are presented in Chapter III. In Chapter IV the sample, instruments, and procedures are described. Chapter V contains the analysis of the data, and Chapter VI is the discussion of the results, and implications for future research and educational practices.

CHAPTER II

REVIEW OF THE LITERATURE

The purpose of this chapter is to review the relevant literature in order to explore the adjustment of the immigrant child and his/her adjustment to learning in a second culture. The chapter begins with a discussion of Canada as a monolithic society and the Canadian immigrant child from an ethnic-minority. A discussion of ethnic group differences in academic achievement--a review of the research and Bloom's theory--follows. The literature that considers the uniqueness (sources and areas) of the ethnic-minority child is reviewed. Only the literature that studied the ethnic-minority student in kindergarten, elementary school and occasionally in junior high school is examined. The chapter concludes with a summary of the issues raised and their applicability to the study of the immigrant child and his/her adjustment to learning.

Canada--A Monolithic Society

Canada, demographically, has been a multicultural society since the first Canadian census in 1871. Historically, however, the image of Canada as a multicultural society that reflects its multicultural composition has not held general appeal (Breton, 1978; Careless, 1970; Creighton, 1972). Instead, the idea of Canada as a monolithic society with one

language and one culture has been the dominant Canadian philosophy.

According to this monolithic philosophy, a society should speak one language and transmit one culture (Gordon, 1964; Murguria, 1975). This language and culture should be transmitted by all societal institutions--the home, the school, the community, and the nation. In addition, the language and the culture of this monolithic society should be the language and culture of the dominant, homogeneous group. In Canada, this is the white, Anglo-Saxon, English speaking, middle class, to be referred to as the Canadian majority.

The persistence of a monolithic philosophy in Canada has influenced the educational policies and practices (Ashworth, 1975; Beck, 1975; Martin & Macdonell, 1978; McLeod, 1975). As a result of societal pressure, educators have directed their policies and practices toward the creation of a Canadian monolithic society. Thus, the educators have endeavored to transmit one language and one culture (that of the Canadian majority) and have expected all students, regardless of their ethnic background, to adopt them. Canadian educators strove to make all ethnic groups "Canadian." This educational aim was well illustrated in the writings of McLeod (1975) on the history of the

immigrant student in Canada. In quoting from a speech by Ryerson presented in 1849, he stated:

> Many of these immigrants will doubtless add both to the intelligence and productive industry of the country. But is this the character of most of them? From their former wretched circumstances and still more wretched habits, they are notoriously as destitute of intelligence and industry, as they are of means of subsistence. Their condition appeals to our own humanity; but their character justly excites our solicitude, and demands our practical attention. The physical disease and death which have accompanied their influx among us may be the precursors of the worst pestilence of social insubordination and disorder. It is therefore of the last importance that every possible effort should be employed to bring the facilities of education within the reach of the families of these unfortunate people, that they may grow up in the industry and intelligence of the country, and not in the idleness and pauperism, not to say mendicity and vices of their forefathers. (p. 20)

This thrust toward Canadianization has not been confined to the 19th century but has persisted well into this century. The fact of the matter was that,

> in classroom after classroom in the province (Ontario) immigrant children and children whose mother tongue is not English or French are being subjected at this very moment to continued programs of Canadianization based on the concept of and belief in assimilation. (McLeod, 1975, p. 29)

Thus, the idea of Canada as a monolithic society with one language and culture (or possibly two languages and cultures) remained the dominant philosophy.

The Canadian Immigrant Child from an Ethnic-Minority

Until recently, the educational philosophy of Canadianization has not been challenged (McLeod, 1975). Schools in Canada have continued to promote programs of Canadianization and to ignore the unique language and culture of Canada's ethnic-minorities (Lind, 1974). As a result, it has been common to describe students whose families have immigrated to Canada from a culture that was very different from that of the Canadian majority as "culturally deprived" or "culturally disadvantaged" rather than "culturally different" (Anisef, 1975; Ashworth, 1975; Ramcharan, 1975).

If Canadian schools were indeed promoting programs of Canadianization and were indeed ignoring the unique language and culture of Canada's ethnic-minorities, then it would seem logical to assume that the Canadian school system would have been ineffective in meeting at least some of the educational needs of immigrant students; therefore, these students would have been at an educational disadvantage when compared to their Canadian majority peers. The surveys of Ramsey and Wright (1970, Wright and Ramsey (1970), Wright (1970; 1971), Deosaran (1976), and Gershman (1976) which reported that large numbers of Toronto immigrant students were in special education classes, tended to support the contention that Canadian schools have been ineffective in meeting the

educational needs of these students. One question remained: Could the ineffectiveness have stemmed from the fact that Canadian schools were ignoring the unique language and culture of its ethnic-minorities?

Ethnic Group Differences in Academic Achievement

That individual differences in school learning exist has been clearly attested to by parents, teachers, and by almost every research project dealing with achievement (Annesley & Cook, 1975; Bowd, 1972; Brittan, 1976; Coleman, et. al., 1966; Howard & McKinnon, 1970; Primavera, Simon, & Primavera, 1974; Sebeson, 1970; Uguroglue & Walberg, 1970). Furthermore, studies on academic achievement have revealed not only individual differences but also ethnic group differences (Baldwin, McFarlane, & Garvey, 1971; Baughman & Dahstrom, 1968; Coleman, et. al., 1966; Carter & Segura, 1979; Dreger & Miller, 1968; Ecroyd, 1968; Lesser, Fifer, & Clark, 1965; Marjoribank, 1978; Purves, 1973; Singer, Gerard, & Redfearn, 1975). The research on ethnic group differences (Coleman, et. al., 1966; Dreger & Miller, 1968; Singer, et. al., 1975; Thorndike, 1973) has indicated that the academic achievement of ethnic-minority students (American Blacks and Mexican-American) was less than that of the ethnic-majority group (American, white, Anglo-Saxon, English speaking,

middle class). These differences became significant at least by grade 3 and tended to stabalize or to increase over the many years of schooling (Bloom, 1964; 1976; Coleman, et. al., 1966; Purves, 1973; Thorndike, 1973).

To explain the ethnic group differences in academic achievement, some psychologists (Jensen, 1972; 1973) have claimed that the achievement differences were due to differences in the genetic makeup of the learners within these groups. Other psychologists (Baratz & Baratz, 1970; Bereiter & Englemann, 1966; Burton, 1969; Englemann, 1969) have argued that these ethnic group differences were due to differences in the environment. The latter pointed out that ethnic-minority students, unlike their ethnic-majority peers, generally experience poverty, lack of educational opportunities, and other environmental disadvantages. However, both positions have been criticized for failing to consider adequately, the interaction of the environment and heredity and the effects of this interaction on human behavior (Anastasi, 1958; Scarr-Salapatek, 1973).

One educator who has developed a theory of learning that could explain ethnic group differences in academic achievement and that appeared to include the effects of environment, heredity, and the interaction of the two on

a student's learning was Benjamin Bloom (1976). Bloom contended that much of the differences in learning among students was due to the interaction between the environment (conditions and practices in the home and school) and the student (development and learning experiences and abilities).

According to Bloom (1976), the teaching practices in school have tended to be standardized. Teachers teach students an established curriculum with a limited set of material and in a routine manner. As a result of these fixed practices, the education of a group of 20 or 30 learners was effective for some but not for others. If this process was repeated, those students who were unable to learn would fall further behind and the learner differences in academic achievement would become exaggerated.

In order to minimize the learner differences due to fixed teaching practices, Bloom (1976 posited what he called an "error-free" system of instruction. He assumed that the "learner's history" or the learner's development and prior learning was the core to learning. Each learner, he argued, began a school grade with a particular history. If it were possible for each learner to enter a grade with a similar history, it would seem that much of the differences resulting from environmental influences would disappear. However, in

practice this was not the case. Most learners entered with different histories; thus, each learner was prepared differently for learning.

Bloom (1976) argued further that when a student with a particular history of development and learning entered a new learning situation, some of his/her previous history would influence the interaction between the student and the task, and ultimately the learning outcome. Bloom (1976) identified the components of this critical history as,

1. Cognitive entry behavior.
2. Affective entry behavior.
3. The quality of the instruction.

Cognitive Entry Behavior

Bloom (1976) defined cognitive entry behavior generally as the prerequisite learning needed for a particular task. More specifically he included:

1. Prior achievement or prerequisite learning.
2. Reading comprehension or the ability to understand and follow written instructional material.
3. Learning styles or the manner in which an individual student learns.

Affective Entry Behavior

Bloom (1976) defined affective entry behavior as the

interest or desire to learn. More specifically, he included among the affective entry behaviors the following:

1. Academic self-concept or affect which was related to a particular class of learning tasks such as reading and writing.

2. School-related affect or affect that was related to school and school learning.

3. Self-concept or affect which was related to self as a learner.

The Quality of the Instruction

In addition to the quality of the entry behaviors, Bloom (1976) assumed that learning was influenced by the quality of the instruction or by the particular characteristics of the interaction between the instructor and the student. Bloom included under quality of instruction the following:

1. Cues or directions provided by the teacher to the learner.

2. Participation or practices (overt or covert) introduced to facilitate learning.

3. Reinforcement or the teacher's use of approval or disapproval of the student and his/her learning.

In summary, Bloom's theory implied that if a teacher

was to teach his/her students effectively, he/she had to consider the unique history of each student. The teacher had to examine each student's entry behavior (prior learning, ability to understand written instructions, cognitive style), his/her affective entry behavior (interest and desire to learn, academic self-concept), and the quality of the instructions (the quality of the interaction between the teacher and student or social interaction behavior) in order to gain some understanding or knowledge of each student's unique history. From this knowledge, the teacher would be able to structure his/her teaching practices or strategies to meet the learning needs of each student. If these needs were met, then each student would be educated effectively and the learning differences among students would be minimized.

Similar approaches to student education have been advocated by Ausubel, Novak, and Hanesian (1978), by Good and Brophy (1977), and by Frederick and Walberg (1980). According to Frederick and Walberg (1980),

> Learning is produced in schools in a context of many variables that affect its effectiveness. These variables are attributable to the student, the quality or method of instruction, the relationship of the student to others in the social environment, and the skills of the people responsible for instruction. (p. 193)

Thus the effectiveness of learning appeared to be dependent on the student and the learning environment.

The critical question then became: How would Bloom's theory explain the ethnic group differences as found in the literature on academic achievement? The logical answer seemed to be that teachers were not considering the unique history of the ethnic-minority child and were using standardized practices of teaching. These standardized practices were more effective in meeting the learning needs of the ethnic-majority students than in meeting the learning needs of the ethnic-minority students. As a result, the ethnic-minority students did not do as well as their ethnic-majority peers on tests of academic achievement. These teaching practices were continued over the many years of schooling; therefore, the differences in academic achievement between the ethnic-minority students and the ethnic-majority students compounded.

The next critical question became: How could these ethnic group differences in academic achievement be minimized? Bloom (1976) suggested that the unique history of ethnic-minority students must be considered by educators and must be incorporated into the teaching practices if ethnic-minority students were to learn effectively. If the unique histories

of ethnic-minority students were considered, the ethnic group differences in academic achievement would be minimized.

The Uniqueness of the Ethnic-Minority Child

The question now arises. Why would the history of ethnic-minority students differ from the history of the ethnic-majority students?

Researchers (Carter & Segura, 1979; Dreger & Miller, 1968; Hernandez, 1973; Powell, 1973; Ramirez III & Castaneda, 1974) have suggested that behavior differences between the ethnic-minority students and the ethnic-majority students generally stem from two sources. These two sources, the unique culture and membership in a minority cultural or ethnic group, are discussed briefly below.

Unique Culture

It is well documented that cultural groups do differ from one another in various ways (Beals, Hoijer, & Beals, 1977; Bourguignon, 1979; Case, 1977; Cole & Scribner, 1974; DeVos & Heppler, 1969; Gruenfeld, Weissenberg & Lok, 1973; Harris, 1975; Kagan, 1974; MacArthur, 1975; Mack-Drake, 1979; Ramirez III & Castenada, 1974; Serpell, 1976; Witkin & Berry, 1975; Vernon, 1970). Members of one cultural group may vary from members of another cultural group on motor behaviors, communication and language, perception, cognition and logical

thought, religion, art, and interpersonal relationships to name a few.

According to a number of sociologists and anthropologists (Barnouw, 1963; Beals, et. al., 1977; Boas, 1938; Harris, 1975; Linton, 1945; Montague, 1961; 1974; Trueba, 1979), the variations in behaviors among different cultural groups have been due to variations in cultural knowledge. Cultural groups have, over time, acquired unique knowledge and have shared this unique knowledge with their members. As a result, the members of the cultural group come to display or exhibit characteristics which distinguish them as members of that specific cultural group.

Ethnic-minority students have acquired the knowledge of their mother culture from their parents. As a result of this acquisition, these students come to exhibit many, or at least some, of the characteristics of a member of the mother culture. These distinct characteristics may differ from the characteristics of ethnic-majority students.

Memberhip in an Ethnic Minority

Historically, multicultural nations have tended to promote the formation of a monolithic society within it's boundaries (Breton, 1978; Gordon, 1964; Murguria, 1975). Within a monolithic society, all the members of

the society were encouraged to speak the language and to adopt the culture of the dominant, homogeneous group. In addition, all societal institutions such as the home, school, community, and nation were encouraged to transmit this one language and culture (Breton, 1978; Gordon, 1964; Murguria, 1975). As a result of this promotion, it was common for such nations to come to value the language and culture of the dominant, homogeneous group, the ethnic-majority, and to come to devalue the culture and language of other smaller groups, the ethnic-minorities (Breton, 1978; Gordon, 1964; Murguria, 1975; Ramirez III & Castaneda, 1974). These national or societal values tended to encourage the belief that the language and the culture of the ethnic-minorities was inferior and that, in turn, the individuals who spoke a language and transmitted a culture of an ethnic-minority was inferior (Ramirez III & Castaneda, 1974).

The societal belief in the inferiority of the language and culture of the ethnic-minorities has created unique problems for individuals of ethnic-minorities (Carter, 1968; De Vos, 1980; Hernandez, 1973; Justin, 1970; Lambert, 1970; Levine, 1969; Murguria, 1975; Ramirez III & Castaneda, 1974). This belief appeared to influence how society viewed and interacted with an individual from an ethnic-minority (De Vos,

1980; Ramirez III & Castaneda, 1974). In addition, this belief created a dilemma for individuals of ethnic-minorities. Should the individual reject his/her mother culture and language and adopt the language and culture of the ethnic-majority, thus meeting societies demands or should he/she continue to practice his/her mother language and culture despite societal pressure? Such cultural conflict appeared to influence how a member of an ethnic-minority approached society (Herandez, 1973; Justin, 1970; Levine, 1969; Ramirez III & Castaneda, 1974) and how he/she viewed himself/herself within the society (Carter, 1968; Hernandez, 1973; Ramirez III & Castaneda, 1974).

Ethnic-minority children acquired the mother language and culture from their parents. If the mother language and culture was different from the language and culture of the ethnic-majority, then such children could experience the unique problem of a member of an ethnic-minority.

Following the discussion on the sources for the unique history of ethnic-minority students, the next and the last major question that must be asked was: What is the unique history of ethnic-minority students?

Researchers (Carter & Segura, 1979; Dreger & Miller, 1968; Hernandez, 1973; Powell, 1973; Ramirez III & Castaneda,

1974) have indicated a number of cognitive, affective, and social behaviors that appeared to be relevant to academic achievement and that were generally unique to students of ethnic-minorities. These cognitive, affective, and social behaviors centered around the areas of:

1. Second language learning.
2. Cognitive style.
3. Self-concept.
4. Motivation.
5. Human-relations.
6. Alienation.
7. Teacher expectations.

Second Language Learning

Language (a conventional system of expressive verbal and/or nonverbal signs which functioned psychologically as an instrument of conceptual analysis and socially as a means of communication) has been considered to be an integral part of culture (Bram, 1955; Donoghue & Kunkle, 1979; Edwards, 1976; 1977; Fishman, 1977; Gibson, 1978; Hallowell, 1955; Ramirez III & Castaneda, 1974; Sapir, 1961; Sotomayor, 1977; Wardhaugh, 1976). Language was thought to convey culture and in turn was subject to the beliefs and attitudes of a culture. For example, if we were to look at the concept of

time in three cultures we would find that in English the clock runs; in Spanish the clock walks; while in some North American Indian tribes, it ticks. In this example it became apparent that the verbal expression of time has been shaped by the cultural view of time and in turn, through language the cultural view of time was reflected. It was suggested, therefore, that when a person learns a language he or she learns much about the beliefs and sttitudes of the culture.

Children of ethnic-minorities frequently communicated in a language that was different from the ethnic-majority (Hernandez, 1973; Kalbach, 1978; Ramirez III & Castaneda, 1974). As a consequence, these children had to learn not only a new language but also another culture that was reflected in the language. A search of literature on learning a second language (Burt, 1975; Burt & Kiparsky, 1974; Buteau, 1974; Candler, 1979; Carton, 1971; Dulay & Burt, 1974; Ervin-Tripp, 1974; Etherton, 1977; Gardner, 1968; George, 1972; Gezi, 1974; Hernandez, 1973; Jacobson, 1971; Jaramillo, 1973; Lambert, 1967; Levin, 1969; McLaughlin, 1978; Merio, 1978; Nida, 1971; Politzer & Ramirez, 1973; Richards, 1971; 1974; 1975; Ross, 1976; Schachter, 1974; Schumann, 1978; Selinker, 1972; Stenson, 1974; Strevens, 1965; Swain, 1978; Tarone, 1978; Taylor, 1976) has indicated that learners may

encounter a number of problems that may affect the ease with which they learn the second language and which, in turn, may affect the rest of their school achievement (Anderson & Johnson, 1971; Arnold & Taylor, 1969; Baratz, 1969; Baratz & Baratz, 1970; Cazden 1966; Cheyney, 1976; Cullinan, Jaggar & Strickland, 1976; Deutsch, 1965; Downing, Ollila, & Oliver, 1975; Ecroyd, 1968; Geffner & Hochberg, 1975; Hall & Turner, 1974; Higgins, 1976; Howard, Hoops, & McKinnon, 1970; Somervill, 1974; Wight, Gloniger & Keeve, 1970; Worley & Story, 1967).

These problems can be discussed under the three major areas of:

1. Language interference.
2. Competence in the second language.
3. Psychological factors.

Language interference. One common problem in learning a second language was language interference (Baratz, 1969; Dulay & Burt, 1974; Etherton, 1977; George, 1972; Hernandez, 1973; Merio, 1978; Politzer & Ramirez, 1973; Richards, 1971; 1974; Saville-Troike, 1979; Schachter, 1974; Selinker, 1972; Taylor, 1976). Language interference occurred when a person attempted to communicate in the second language and substituted elements of the first language (mother language) into

his/her communication. In this case, it appeared as if the prior learning of the mother language interjected into the learning of the second language. If the interjection was compatible with the second language requirement, the interjection would continue to promote second language learning; however, if the interjection was incompatible, it would hinder the learning of the other language.

Language interference has been found at most levels of second language acquisition. It has been found at the level of pronunciation, morphology, syntax, vocabulary, and meaning (Dulay & Burt, 1974; George, 1972; Merio, 1978; Politzer & Ramirez, 1973; Richards, 1971; Saville-Troike, 1979; Selinker, 1972). For example, if a French student omitted the plural "s" when speaking English, interference in pronunciation may have occurred. In French, plurals are not pronounced and therefore, this student may have applied the French rules to the English language. If an English student translated the English sentence "I see her" into the French sentence "Je vois elle," it would appear as if interference in syntax had occurred. In this case the English sentence had been translated word-for-word into French. The child had not considered the unique French rules of syntax and had relied on his or her prior learning of English syntax. Comparable

problems also occurred at other levels of language, vocabulary, and word meaning.

Although it has seldom been referred to, interference probably also occurred in the kinesics, proxemics, and haptics of the nonverbal aspects of second language learning. In all cases, the speaker tends to carry the habits of his or her mother language into the learning of the second language.

Although most investigations in second language learning have suggested that language interference was a common error in second language learning, they have not necessarily agreed on its importance. Richards (1971) has declared that interference from the mother tongue was the major source of difficulty in second language learning. Using data of English errors produced by speakers of Chinese, Burmese, Tagalog, Maori, Maltese, and the major Indian and West African languages, he found that language interference was not only a frequent source of error but that it occurred across all language groups. Politzer and Ramirez (1973), like Richards (1971), suggested that language interference was a major cause of error for Spanish children learning English. They wrote that "the intrusion of Spanish, though certainly not the only cause of error, plays a considerable role. Spanish

influence seems to be the major cause of error or at least one of the major causes of error" (p. 59). Not all researchers, however, would have agreed with Richards (1971) and Politzer and Ramirez (1973). Dulay and Burt (1974a) reported that language interference accounted for only 4.7% of the errors for Spanish children who were learning English. This low frequency of interference error has been reported by a number of other investigators studying a wide variety of language groups (Burling, 1978; Dulay & Burt, 1973; Leopold, 1978; McLaughlin, 1978; Price, 1968; Ravem, 1974a; 1974b; 1978).

At first glance, these mixed results seem to be more confusing than meaningful; however, investigations by Merio (1978) and Schacter (1974) have thrown some light on the inconsistent results. Merio (1978), on reporting on the interference errors of Finnish students speaking Swedish, noted that the percentage of interference errors varied with the level of second language learning under analysis. In his group, the greatest frequency of interference occurred at the level of syntax (31.55%) while the least occurred in vocabulary (8.90%).

Schachter (1974) has suggested that the frequency of interference error varied with the linguistic compatibility

of the two language systems. She has proposed that the learner constructed hypotheses about the second language based on his or her knowledge of the mother tongue. If the learner believed the constructs were similar he/she would have transferred the strategies of the mother tongue to the second language and interference would have occurred. If, however, the two language constructs were seen by the learner as being very different, he/she would either have rejected the new construct or would have used it with caution. Interference, therefore, was dependent on the learner and the compatibility of the two language groups.

In light of the literature, language interference error should have been considered when looking at second language acquisition. An investigation of the frequency of such errors in the speech of second language learners could have been a valuable source of information.

Competence in the second language. Another source of errors has been found to be in the area of competency in the second language. These errors appeared to have resulted from an inadequate understanding of the syntax and semantics of the second language (Burt, 1975; Buteau, 1974; Candler, 1979; Dulay & Burt, 1974a; 1974b; Duskova, 1969; Ervin-Tripp, 1974; George, 1972; Hatch, 1978; Politzer & Ramirez, 1973;

Ross, 1976; Stenson, 1974; Tarone, 1978). This class of error, like those of language interference, have been reported to exist at most levels of second language learning --in pronunciation, syntax, vocabulary, and meaning (Burt, 1975; Politzer & Ramirez, 1973; Ross, 1976). Politzer and Ramirez (1973) used the examples of "the apple go (for fell) on his head" or "the apples were shooting (for falling) on him" to exemplify semantic competence errors. In these instances, the Spanish children appeared to know something about the semantic features of the word "go" and "shooting" but they were not certain of the total meaning. As a result, they used the words inappropriately. In another example of Politzer and Ramirez (1973), the Spanish learner said, "He flew (for threw) a leaf down." This error could be one of competence in pronunciation. Here, the English words "flew" and "threw" are phonetically similar and the learner could have mispronounced the word.

The question now becomes: What level of competence in a second language is required if the second language learner is to succeed academically?

Within the last two decades, a considerable amount of literature has accumulated in which it has been assumed that a proficiency in oral language was essential for academic

success (Anderson, et. al., 1971; Arnold, et. al., 1969; Baratz, 1969; Baratz & Baratz, 1970; Cheyney, 1976; Cullinan, et. al., 1976; Deutsch, 1965; Downing, et. al., 1975; Entwistle, 1968; Geffner, et. al., 1975; Hall & Turner, 1974; Hernandez, 1973; Houston, 1970; Somervill, 1974; Wight, et. al., 1970). This assumption was strengthened by the fact that in traditional school systems, achievement was dependent on the student's ability to express what they knew clearly in an acceptable form. More recently, researchers have begun to question this assumption (Aiken, 1972; Bougere, 1969; Gray, Saski, McEntire, & Larson, 1980; Groff, 1978; Loban, 1963; Stedman & Adams, 1972). So far, however, they have been unable to provide a definite answer. Some studies have indicated a strong positive relationship between oral language and math (Stedman & Adams, 1972) and also between oral language and reading (Loban, 1963). Other studies have reported a moderate to low relationship between oral language and reading readiness (Bougere, 1969) and between oral language and general school readiness (Gray, et. al., 1980).

The inconsistencies in the research have led several educators (Aiken, 1972; Groff, 1978) to express doubt that a highly positive relationship did exist between oral language proficiency and academic success, and to suggest

that a basic understanding of the meaning of words and of syntax in order to express ones ideas clearly was probably all that was required for academic success. Therefore, the implication of the research on oral proficiency and academic success for a second language learner was that a certain level of second language understanding was essential for academic success. The second language learner must have an adequate understanding of the meaning of words and of the basic syntax in order to express his/her ideas clearly.

Psychological factors. Learning a second language has been facilitated if the student has had a positive attitude toward second language learning (Christensen, 1977; Gardner, 1968; Gardner & Lambert, 1972; Gardner & Smythe, 1974a; 1974b; Jacobson, 1971; Lambert, 1967; Nida, 1971; Peal & Lambert, 1962; Saville-Troike, 1979; Schumann, 1978a; 1978b). Since learning a second language has implied learning many of the attitudes and beliefs of the second culture (Hernandez, 1973; Ramirez III & Castaneda, 1974), studying a second language would only have been facilitated if the learner had a positive regard for becoming both bilingual and bicultural.

A review of the literature on motivation and second language learning has implied that both the school and the

home could have played a major role in ensuring a positive attitude toward bilingualism and biculturalism (Bouton, 1975; Carter & Segura, 1979; Gardner, 1968; Gardner & Lambert, 1972; Gardner & Smythe, 1974a; Hernandez, 1973; Jaramillo, 1973; Lambert & Tucker, 1972; Lindsfor, 1980). In order to fullfil this role, the home and the school need to have created an environment in which bilingualism and biculturalism were viewed as assets (Bouton, 1975; Carter & Segura, 1979; Hernandez, 1973; Jacobson, 1971; Jaramillo, 1973; Justin, 1970; Levine, 1969; Lambert, 1967; Ramirez III & Castaneda, 1974). In this environment, the beliefs, attitudes, and language of the mother culture and the second culture would have to be accepted, and the two cultures would have to appear to work in harmony with each other.

According to a number of educators and researchers (Bouton, 1975; Carter, 1970; Hernandez, 1973; Jaramillo, 1973; Justin, 1970; Lindsfor, 1980; Ramirez III & Castaneda, 1974), in order to have created a school environment in which the mother culture and the second culture seem to have worked in harmony, the teacher must have been committed to promoting an open and positive environment both in and out of the school. This could have been achieved if the teacher developed some understanding of the student's mother culture

and of the differences between the mother culture and the school culture (Bouton, 1975; Jaramillo, 1973). Jaramillo (1973) has even suggested that understanding the cultural differences between the mother culture and the second culture was just as important for a second language teacher "as having an excellent curriculum, knowing appropriate techniques or having adequate materials in the classroom" (p. 51).

The implication was that through an understanding of the mother culture and of the differences between the mother culture and the second culture, the teacher would have to create a school environment in which the two cultures were accepted. While the second language learner was within this positive school environment, he/she would have felt free to practice communicating in the second language with his/her teacher and peers. At the same time, the learner would have felt accepted despite his/her cultural differences.

What seemed to be running through the literature on attitudes to second language learning and the school was the importance of creating a school environment in which the second language learner did not experience the agonies of cultural conflict (Carter & Segura, 1979; Hernandez, 1973; Jacobson, 1971; Justin, 1970; Lambert, 1967; Levine, 1969; Ramirez III & Castaneda, 1974). According to Justin (1970)

one of the greatest barriers to the academic achievement of many ethnic-minority children was cultural conflict. In a school environment where the values, beliefs, and language of the student's mother culture were rejected and the standards of the second culture were demanded, the second language learner was confronted by practices that engendered the belief that the mother culture was inferior and possibly damaging (Ramirez III & Castaneda, 1974). These practices could have also implied that the second language learner was also inferior because he spoke the mother tongue. As a result the learner may have been reluctant to speak in the mother tongue both in and out of school (Lambert, 1967; Levine, 1969; Ramirez III & Castaneda, 1974). This reluctance to speak the mother tongue could have led to conflict between the student and the home. The family may have encouraged the use of the mother language at home and may not have understood their child's reluctance to use it. The child, on the other hand, may have resented the parent's unwillingness to speak the second language and their failure to recognize the importance of the second language (Levine, 1969).

The school environment in which the mother culture was rejected, could have led the second language learner to reject the second language and culture, instead of the mother

language and culture (Levine, 1969). This rejection of the second language and culture by the second language learner could have led to conflict with the school. In the school, the learner would have been expected to speak the second language, a practice that would have been contrary to the learner's wishes.

What the educators and researchers have suggested was that the school should have created an environment free of cultural conflicts where the learner would have felt free to practice the second language and, at the same time, have felt accepted despite his/her cultural differences. According to Peal and Lambert (1962),

> the attitude an individual holds toward the other language community plays a vitally important role in his learning the other group's language in school. . . . if he views the other community with favor, he is more likely to do well in his attempts to learn the language, and vice versa. (pp. 19-20)

In such a cultural conflict-free environment, the learner would have learned to view the second language community with favor. In this school environment, second language learning would have been facilitated.

Within the home, the parents must have created an environment in which the two cultures and the two languages were accepted if second language learning was to be

facilitated (Gardner, 1968; Gardner & Lambert, 1972; Gardner & Smythe, 1974a; Lambert & Tucker, 1972). The parents must have regarded bilingualism and biculturalism as an asset (Gardner & Lambert, 1972; Gardner & Smythe, 1974a; 1974b) and must have expressed this positive attitude. It has long been accepted that parent's attitudes to learning influenced their children's attitudes toward learning (Boersma & Chapman, 1978a; Hernandez, 1973; Miller, 1971; Purkey, 1970; Tocco & Bridge, 1973). Second language learning was no exception (Gardner, 1968; Hernandez, 1973). Generally, parents who have expressed a positive attitude to second language learning tend to have children who have expressed a positive attitude to second language learning. Learning a second language was facilitated if the student had a positive attitude toward second language learning.

According to Gardner (1968) parents must have fulfilled two roles in order to promote second language learning. He labeled these roles as (a) active and (b) passive. In the active role, the parents actively and consciously encouraged their children to learn the second language. The parents monitored their children's second language learning by making sure that they did their homework, helping them do their homework when help was needed, encouraging them to do well,

and reinforcing their second language successes. In the passive role, the parents expressed a positive attitude toward second language learning and toward the second culture. The parent's expressed attitude influenced their children's attitudes toward second language learning. It was the children's attitudes that were so influential in motivating them to learn the second language (Gardner, 1968; Gardner & Lambert, 1972; Peal & Lambert, 1962).

Like the school, the family played a major role in promoting second language learning. Both could have hindered language learning by rejecting either the mother culture or the second culture and creating an environment in which the learner experienced the agonies of cultural conflict, or both could have promoted second language learning by accepting both cultures and languages and creating an environment in which the two cultures and two languages worked in harmony.

In light of the literature on second language learning, a study which looked at the adjustment of immigrant children to a second culture should have considered the following:

1. The frequency of language interference errors in a child's conversation.

2. An assessment of the level of second language competence: the assessment should have determined the

child's understanding of the meaning of English words and of the basic English syntax.

3. An assessment of the teachers' attitudes to their immigrant students as learners in their classrooms and as learners from different cultures and to an educational policy of biculturalism (or multiculturalism).

4. An assessment of the parents' attitudes toward their mother cultures and toward school learning in a second culture.

5. An assessment of the parents' attitudes toward school learning in a second culture should have looked at both their passive and their active role.

Cognitive Style

The research on ethnicity and cognitive style (the consistent mode of behavior used when approaching a cognitive task) has centered primarily around the theory and research of Witkin and his colleagues on psychological differentiation (Witkin, 1967; 1974; Witkin & Goodenough, 1976; Witkin & Berry, 1975; Witkin, Dyke, Faterson, Goodenough, & Karp, 1962). According to Witkin and his colleagues, all normal psychological development, whether it centered around perceptual development, cognitive development, or personality development, progressed from a state of less differentiation

or distinction to a state of more differentiation or distinction. In other words, in the normal course of development, the psychological systems of an individual became increasingly differentiated from the environment and progressed from a state of generalization to a state of specialization. Witkin referred to the state of less differentiation as field dependent and the state of more differentiation as field independence.

In the early research on field independence/field dependence, Witkin and his colleagues (Witkin, et. al., 1962) implied that these psychological styles were influenced by child-rearing practices. As a result, researchers began to investigate field independence/field dependence across ethnic-minority groups (Kagan & Buriel, 1977; MacArthur, 1975; Ramirez III & Castaneda, 1974; Ramirez III & Price-Williams, 1976; Sanders, Scholz, & Kagan, 1976) and reported variations across and between ethnic-minority groups and the ethnic-majority group. However, in a recent study on culture and cognitive style of field independence/field dependence, variations in cognitive style between Chinese-English students and Anglo students from Alberta were not found to be significant (Yu, 1981). The study, therefore, suggested that the cognitive style of field independence/field dependence

between Alberta's ethnic-minorities and ethnic-majority was not unique.

Self-concept

Self-concept, defined as the total affective regard that one holds for oneself, was a student attribute that has shown a significant positive relationship with academic achievement (Bledsoe, 1967; Caplin, 1969; Cobb, Chisson, & Davis, 1975; Fink, 1962; Hishike, 1969; Piers & Harris, 1964; Purkey, 1970; Rogers, Smith, & Coleman, 1978; Roth, 1959; Sebeson, 1970). Several researchers have reported that school achievers tended to have a more positive self-concept than school underachievers (Battle, 1979; Combs, 1964; Felice, 1973; Paschal, 1968; Primavera, Simon, & Primavera, 1974; Purkey, 1970; Shaw & Alves, 1963; Shaw, Edson, & Bell, 1960). As a result of such findings, a number of researchers concluded that a persistent and significant relationship clearly existed between the variables self-concept and academic achievement (Levition, 1975; Purkey, 1970).

Such research findings have also led some investigators to explore the self-concept of minority children in the United States. These investigators have noted that many of the Black, Mexican-American, Indian, and Puerto-Rican children in the United States performed poorly on measures

of academic achievement when compared with their majority peers (Baughman & Dahstrom, 1968; Coleman, et. al., 1966; Carter & Segura, 1979; Dreger & Miller, 1968; Ecroyd, 1968; Hernandez, 1973). They proposed that poor school achievement among the minority children was associated with a poor self-concept. This condition led to a deluge of research on the self-concept of minority ethnic children. The reported findings, however, have not led to any clear conclusion as to the relationship between self-concept and academic achievement in minority ethnic groups.

A number of studies have found the expected low self-concept in Mexican-Americans (Coleman, et. al., 1966; Felice, 1973; Hishiki, 1969; Stephan & Kennedy, 1975; Stephan & Rosenfeld, 1978; 1979), in Puerto Ricans (Coleman, et. al., 1966; Zirkel & Moses, 1971), in Black American students (Bledscoe & Garrison, 1962; Carpenter & Busse, 1969; Deutsch, 1960; 1965; Dreger & Miller, 1968; Gray-Little & Applebaum, 1979; Heller, 1966; Hisiki, 1969) and in North American Indian students (Downing, Ollila, & Oliver, 1975). Several studies have indicated that there were no differences between the self-concepts of white students and black students (Carpenter & Busse, 1969; Gibby & Gabler, 1969; Edwards, 1974; Hodgkins & Stakenas, 1969; Rosenberg, 1965; Stephan & Kennedy,

1975; Stephan & Rosenfeld, 1978; 1979), and between white students and Mexican American students (DeBlassie & Healy, 1970; Carter, 1968). Other studies have reported a significantly more positive self-concept in black children (Baughman & Dahlstrom, 1968; McDonald & Gynther, 1965; Powell, 1973; Powell & Fuller, 1970; Powers, Dane, Close, Noonan, Wines, & Marshall, 1971; Rosenberg & Simmons, 1971).

In response to these ambiguities in the research, some researchers have investigated the effects of socioeconomic status on the self-concept of the children from different ethnic groups (Brookover, Schweitzer, Schneider, Beady, Flood, & Wisenbaker, 1978; Coleman, et. al., 1966; Deutsch, 1960; Ketcham & Snyder, 1977; Long & Henderson, 1968; Spencer, 1977; Soares & Soares, 1969; Stephan & Rosenfeld, 1979; Trowbridge, 1970; 1972; Zirkel & Moses, 1971). These researchers have noted that many of the minority ethnic children came from lower socioeconomic homes (Coleman, et. al., 1966; Nobles, 1973; Trowbridge, 1972). The results on socioeconomic status and self-concept however, were just as inconsistent.

Self-concept has also been studied in relation to the proportion of the different ethnic groups in the school setting (Coleman, et. al., 1966; Hodgkins & Stakenas, 1969;

Power & Fuller, 1970; Rosenberg & Simmons, 1971; St. John, 1971; Stephan & Kennedy, 1975; Stephan & Rosenfeld, 1978). In the earlier studies on ethnicity and self-concept, researchers noted that many of the children from the minority ethnic groups attended segregated schools in which the minority-ethnic groups were in a majority. They suggested that perhaps it was the proportion of ethnic-minority students to ethnic-majority students that influenced the self-concepts of the ethnic-minority group (Hodgkins & Stakens, 1969; St. John, 1971; Stephan & Kennedy, 1975; Stephan & Rosenfeld, 1978). The research results on the self-concept of minority ethnic groups in segregated and de-segregated schools, however, were just as inconsistent and inconclusive as those on self-concept and ethnicity and on self-concept and socioeconomic status.

There is no doubt that some of the ambiguities in the literature on self-concept and ethnicity, self-concept and socioeconomic status, and self-concept and segregated and de-segregated schools can be attributed to differences in definition, the instruments used, research design, age groups, times of study, and individual student differences (Gray-Little, et. al., 1979; Hernandez, 1973; Shavelson, Hubner & Stanton, 1976; Scheirer & Kraut, 1979; Zirkel,

1971; Zirkel & Moses, 1971). In some cases, research studies that were measuring general self-concept were being compared with studies that were measuring the self-concept of subjects on specific academic tasks. This latter observation led Hernandez (1973) to suggest that minority children may have a positive self-concept but a negative academic self-concept. The importance of the definition of self-concept and of the type of instrument being used in an investigation of self-concept has support in the literature on the academic self-concept of achievers and nonachievers (Brookover & Erickson, 1975; Brookover, Paterson, & Thomas, 1962; 1964). The definition of self-concept and the instrumentation in research on self-concept, school achievement, and ethnicity warrants consideration as well.

In light of the research literature on self-concept and ethnicity, a study which looked at the adjustment of immigrant children in a second culture should have considered the following:

1. The relationship between self-concept and ethnicity.

2. The relationship between self-concept, ethnicity, and socioeconomic status.

3. The definition of self-concept and the instrumentation: if researchers were examining the academic

achievement of students, they should have examined academic self-concept instead of general self-concept.

4. The proportion of immigrant children to non-immigrant children in the school.

Motivation

According to Havighurst and Neugarten (1975), the motivation or incentive to stay in school and to seek advanced education arose from at least four factors.

1. The need for achievement. There seemed to exist in some individuals a need to achieve that drove them toward learning as much as they could.

2. Identification with a person who had gone on to college or done well in school.

3. Social pressures. Family, friends, teachers, or others in the community who held academic expectations that acted as a pressure on the learner.

4. Intrinsic pleasure in learning.

Of the four factors, the first one, the need to achieve has received the most attention. For several decades now D. C. McClelland and his colleagues (Heckhausen, 1967; McClelland, 1955; McClelland, Atkinson, Clark, & Lowell, 1953; Moss & Kagan, 1961; Vidler, 1977) have investigated

this factor under the term "achievement motive." According to McClelland, et. al., (1953), "achievement motive" was an organization of plans, actions, and feelings directed toward achieving a personal standard of excellence. The investigations of McClelland and his colleagues have led to an accumulation of considerable knowledge on factors relating to achievement-motivation. Achievement-motivation has been related to a number of personality factors (Heckhausen, 1967; McClelland, 1955; McClelland, et. al., 1953; Moss & Kagan, 1961; Vidler, 1977), to child-rearing practices (McClelland, et. al., 1953), and to cultural values (Vidler, 1977).

Although McClelland and his colleagues have recognized that achievement-motivation was related to cultural values and child-rearing practices, they have been criticized for failing to consider the possibility that achievement-motivation may have been expressed differently in different cultures (Maehr, 1974). Maehr argued:

> The important principle is that achievement and achievement motivation must be understood in terms of the sociocultural context in which they are found, as well as in terms of generalized descriptions of achieving norms or abstract constructions of psychological processes. (1974, p. 894)

Certainly, a review of the research literature on achievement-motivation across cultures would have tended to

support this contention. De Vos (1968) reported that successful Japanese students seemed to be motivated more by a concern for the reactions of others than by the need for personal satisfaction when compared to Anglo-American students. Similar results were reported by Gallimore, Weiss, and Finney (1974) among Hawaian students. In addition, young Hawaians seemed to regard contribution to and continuing affiliation with the family as a more important goal than personal achievement, a motivational need that appeared to be high among Anglo-American students (Gallimore, Boggs, & Jordon, 1974). Mexican-American and Black-American children also seemed to score higher on need achievement for family than their Anglo-American peers (Gray, 1975; Ramirez III & Castaneda, 1974; Ramirez III & Price-Williams, 1976; Ramirez III, Taylor, & Pederson, 1971; Sanders, Scholz, & Kagan, 1976). In addition, Mexican and Mexican-American children as a whole seemed to score higher on co-operative achievement than their Mexican and Mexican-American peers (Avellar & Kagan, 1976; Kagan, 1977; Kagan & Madsen, 1971; 1972a; 1972b; Knight & Kagan, 1977; Kagan, Zahn, & Grealy, 1977; Madsen & Shapira, 1970).

Together the studies suggested possible ethnic variation in the achievement-motivational styles of achievement for

family, co-operative achievement, and need for personal achievement. Such variations could have influenced the adjustment of immigrant children to their second culture.

Human Relations

The investigations on human-relational style (the consistent mode of relating to others) has stemmed out of the research on ethnic variation on achievement-motivation. In the research on ethnicity and achievement-motivation (Gallimore, Weiss, & Finney, 1974; Gallimore, Boggs, & Jordon, 1974; Gray, 1975; Ramirez III & Price-Williams, 1976), it was noted that ethnic groups also varied in their mode or style of relating to others, or in other words, their human-relational style.

Researchers have reported that Mexican-American children scored higher on need affiliation (the need to interact and belong to a social group) than their Anglo-American peers (Gray, 1975; Ramirez III & Price-Williams, 1976). Similar results have been found with Japanese children (De Vos, 1968) and Hawaian children (Gallimore, Boggs & Jordon, 1974; Gallimore, Weiss, & Finney, 1974). In addition, it has been noted that Mexican-American students scored higher on need to nuture (showing greater sensitivity to other's feelings and willingness to help others), and need succorance

(willingness to rely on others, particularly adults, for help and guidance) than their Anglo-American peers (Ramirez III & Castaneda, 1974).

Together these research findings suggested ethnic variation in human-relational styles of need affiliation, need to nuture, and need succorance. Such variation could have influenced the interaction between an immigrant student and his/her teacher and, in turn, the adjustment of the student to his/her second culture.

Alienation

The term alienation has been one of the central concepts in sociology for many decades. Originally, the term was linked to the classical work of Marx, Weber, and Durkheim who defined the term as a disillusionment felt by an individual with what was once considered to be a meaningful social institution or system. Although many contemporary social scientists continue to use the term in its classical sense, others have expanded the definition (Clark, 1959; Seeman, 1959) to include a variety of concepts. As a result, the term was assigned the rank of "extremely useful but loosely defined" (Clark, 1959, p. 849).

Seeman (1959; 1963) realized how important the concept of alienation was to sociology and attempted to clarify it.

After examining the many definitions of alienation reported in the literature, he proposed that the term "alienation" should not only include the relationship between the individual and the social system as presented in the classical writings but also should include the view held by the individual toward himself. Thus, Seeman proposed a five variant concept of alienation. The variants included by Seeman (1959) were as follows:

1. Powerlessness--an individual's belief that his/her rewards were not contingent on his/her behavior.

2. Meaningless--an individual's belief that he/she was not able to satisfactorily predict the future outcomes of his/her behavior.

3. Normlessness--an individual's belief that socially unapproved behaviors were required to achieve given goals.

4. Isolation--an individual's belief that society's goals and beliefs were of little value.

5. Self-estrangement--an individual's belief that future rewards were dependent on given behaviors that lay outside the activity.

Since Seeman's work (1959; 1963) and the introduction of factor analysis to the social sciences, researchers have rigorously limited the definition of alienation.

Recently, researchers have started to investigate the feelings of alienation among ethnic-minority students. Kirby (1969) investigated alienation among migrant Mexican-American students and found strong feelings of alienation toward country, town, and school. Justin (1970) also studied the Mexican-American student and reported that these students scored higher on feelings of powerlessness in school when compared with their Anglo-American peers. In addition, Cordova (1968; 1970) investigated alienation among Mexican-American students. He claimed, however, that the degree of alienation and the form of alienation was related to the degree of assimilation or integration into the American educational and political culture, and to the level of academic achievement in the American school system. Cordova (1968; 1970) reported that with an increase in assimilation into the American culture Mexican-American students experienced a decrease in the feeling of isolation from school and an increase in the feeling of normlessness in school. With an increase in assimilation into the mother culture, Mexican-American students experienced an increase in feeling of powerlessness in school. In addition, with an increase in academic achievement, rural Mexican-American students experienced a decrease in isolation from school.

Although the literature on alienation and ethnic-minority students has been sparse, it has suggested that ethnic-minority students have felt more alienation from school and country than did their ethnic-majority peers. In addition, the literature suggested that the degree and expression of alienation was related to the degree of assimilation into the second culture or the mother culture and to the level of academic achievement. In the research supporting the latter suggestion, it was implied that the Mexican-American child was in a cultural "either--or" situation and he had to choose his second culture and to deny his mother culture or to choose his mother culture and to exclude his second culture. It was therefore not surprising that the child would have experienced feelings of alienation, powerlessness, normlessness, or isolation and that these feelings would have related to school achievement. As was discussed previously under second language learning, one of the greatest barriers to the academic achievement of many ethnic-minority children was cultural conflict (Justin, 1970).

Therefore, in a study which looked at the adjustment of immigrant children to learning in a second culture, the following should have been considered:

1. That there was ethnic variations in the feelings

of alienation.

2. That the feelings of alienation among ethnic-minority students was related to their academic achievement.

3. That the feelings of alienation appeared to be related to the degree of assimilation into the second culture or into the mother culture; therefore, the variable alienation should have been considered as a direct measure of adjustment.

Teacher Expectations

The research on teacher expectations began with the controversial study of Rosenthal and Jacobson (1968) in which children who had been randomly selected but who had been identified to their teachers as late intellectual bloomers performed better on a post test of achievement. Rosenthal and Jacobson explained their results in terms of the self-fulfilling prophecy effect of teachers' expectations. Although this study was highly criticized on methodological grounds (Barber & Silver, 1968; Snow, 1969; Thorndike, 1968) and its premises placed in doubt, more evidence has been made available to support the idea that teachers' expectations were sometimes self-fulfilling (Clifford & Walster, 1973; Crano & Mellon, 1978; Crowl & MacGinitie, 1974; Douglas, 1964; Garwood, 1976; Lerner & Lerner, 1977; Long &

Henderson, 1974; Rist, 1970; Ross & Salvia, 1975; Sutherland & Goldschmid, 1974; Williams, Whitehead, & Miller, 1972). For example, it had been reported that a significant relationship existed between teachers' negative expectations and intelligent quotient changes in children of superior intellectual potential (Sutherland & Goldschmid, 1974) and between teachers' negative expectations and academic achievement in children of low intellectual potential and deprived social environment (Marjoribanks, 1978).

To explain the steady accumulation of evidence supporting the self-fulfilling prophecy effect, researchers turned to the classroom and to the teacher-student interaction (Beez, 1970; Brophy & Good, 1970; Byalick & Bersoff, 1974; Byers & Byers, 1972; Jackson & Lahaderne, 1967; Leacock, 1969; Silberman, 1969). In his early work on teacher expectancy, Rosenthal claimed that teacher expectancies were conveyed to the students through the teachers' behaviors (Taylor, 1979). These behaviors influenced the classroom activities and the students. According to Rosenthal, there were four major areas through which the teachers' expectancies were mediated. These areas he called climate, input, output, and feedback. The climate represented the social-emotional atmosphere communicated through such behaviors as

teachers' smiling, teachers' head nodding, and teachers' maintained eye contact. The second area, input centered around the suggestion that teachers appeared to vary the amount of material covered and the difficulty of the material in terms of student performance expectations. In the case of output, teachers appeared to encourage high-ability students to respond more than low-ability students. The final area, feedback was concerned with teachers' praise and criticism. Rosenthal, therefore, suggested that the teacher conveyed his/her expectations to the students through his/her nonverbal and verbal behaviors and through his/her task-oriented and social-emotional behaviors. More recently, Cooper (1979) has hypothesized a similar model of teacher expectancy mediation.

Although the research on teacher expectancy mediation has not been consistent (Miller, 1978), with some investigators reporting no significant differences in teacher behaviors toward students of varying abilities (Brooks & Wilson, 1978; Luce & Hoge, 1978; Mendels & Flanders, 1973) a number of studies have found that teachers responded differently to high achievers than to low achievers (Brophy & Good, 1970; 1974; Good & Brophy, 1978; Crano & Mellon, 1978; Good, Cooper, & Blakey, 1980; Hoge & Luce, 1979; Jackson & Lahaderne, 1967;

Silberman, 1969). It was found that teachers were more likely to give high achievers a second chance to respond in a failure situation than low achievers. Teachers praised high achievers more for success and criticized them less for failures. As for low achievers, teachers were less likely to wait for low achievers. Teachers did not call on low achievers as often and were more likely to seat low achievers at the back of the room.

Such results lent considerable support to the teacher expectancy mediation theories of Rosenthal and Cooper. However, both the theories and the research have failed to adequately consider the role that the student played in the interaction between the student and the teacher. Teacher-student interaction is a two way process. Students influence the teachers' behaviors as well as the teachers influencing the behaviors of the students. In addition, both have failed to adequately consider the effect that the teachers' variation in behavior between low and high achievers has on other students in the classroom. Rist (1970; 1973; 1978) and Gouldner (1978) noted that students came to respond to students that the teacher held in low esteem in a manner that was similar to the teacher. These researchers hypothesized that the teachers' behaviors that were directed toward

students of low esteem were observed by the other students in the classroom. In time, these other students came to respond to the students of low esteem in a manner that was similar to that of the teacher. This implied that teacher expectations or attitudes influenced their own behaviors and the behaviors of the students in the classroom--the students toward whom the teacher directed his/her attention and their peers. It also suggested that, in turn, teacher expectations or attitudes could have influenced the relationship between the students and the teacher and between the students and their peers.

Ability level has not been the only student attribute that appeared to relate significantly to teachers' attitudes and behaviors. Researchers have provided substantial evidence that student ethnicity (ethnic-majority and ethnic-minority) has sometimes influenced teacher expectancy and teacher expectancy mediation. In the studies on teacher expectancy, ethnicity did not appear to have influenced teachers' subjective evaluations of written material (Piche, Michlin, Rubin, & Sullivan, 1977), but it did appear to have influenced teachers' evaluations of spoken answers (Crowl & MacGinitie, 1974; William, et. al., 1972), teachers' marks (McCandless, Roberts, & Starnes, 1972), casual attributions for past performance (Wiley & Eskilson, 1978), and teachers'

ratings (Datta, Schaefer, & Davis, 1968; Jensen & Rosenfeld, 1974; Leacock, 1969; Long & Henderson, 1974; McCandless, Roberts, & Starnes, 1972; Yee, 1968). These results supported the premise of a significant relationship between ethnicity and some of the teachers' expectations (or attitudes).

The research on teacher expectancy mediation has also provided evidence of a significant relationship between ethnicity and teacher behaviors. Rubovits and Maehr (1973) studied an experimental micro-teaching situation and found significant differences in teacher-student interaction based on ethnicity. These researchers found that student-teachers gave less attention to black students. Student-teachers requested fewer statements from them, encouraged blacks to continue with an idea less frequently, ignored a greater percentage of their statements, praised them less, and criticized them more. Coates (1972) conducted a study similar to Rubovits and Maehr, but instead of using white student-teachers to teach black students and white students he used white adults as teachers. His analysis of the feedback statements made by the adults when teaching showed that female adults did not differentiate between black students and white students but male adults did. Male adults were significantly more negative. Taylor (1979) also investigated

teacher-student interaction in the laboratory and found that there seemed to be a tendency for black students to be the recipients of less positive teacher behavior. This was particularly true for black males. If, however, ability levels were included in the analysis it was apparent that teachers showed more positive affect toward high-ability blacks and low-ability white students. Although these results have implied that the ethnicity effect on teachers' behaviors may have been highly complex with a number of variables interacting with the variable ethnic to influence teachers' behaviors, the studies have suggested that ethnicity does directly influence teachers' behaviors as well.

Studies on teacher expectancy mediation have not been confined to the laboratory. Katz (Brophy & Good, 1974) and Hillman and Davenport (1978) observed students in integrated schools. Katz claimed that ethnicity was significantly related to the frequency of verbal initiations in the classroom. White students initiated interactions much more frequently than black students did. Teachers appeared to either passively accept this trend or actively reinforce it. Hillman and Davenport also found that ethnicity was significantly related to the frequency of verbal initiations in the classroom but in addition,

> blacks received a greater proportion of product questions, gave no response to more questions, received more criticism from teachers for their behavior, had more self-initiated questions or relevant comments, were the recipients of greater teacher nonacceptance of a student question or response, and received more teacher feedback to a student question or response. (p. 550)

Ethnic differences in teacher expectancy mediation has not been confined to black minority students. Jackson and Cosca (1974) observed teacher interaction with Mexican-American students and Anglo-American students in several schools in the American southwest. They reported that teachers praised and encouraged Anglo-American students more, accepted and used the ideas of Anglo-American students more, and directed more questions to Anglo-American students than to Mexican-American students. These results were similar to the previous studies. Together they implied that teachers interact less frequently with and direct more negative behaviors toward their ethnic-minority students than their ethnic-majority peers.

The on-going accumulation of research on ethnicity and teacher expectancy mediation, encouraged the conclusion that teachers tended to discriminate against ethnic-minority students. This conclusion may not have been totally acceptable. Byers and Byers (1972) studied the nonverbal

interaction between white teachers and white and black students. They suggested that teacher behavioral differences toward black students and white students was the result of the student familiarity with the cultural communication patterns of teachers. White students had more successful interactions with the teacher because they were more familiar with the teacher's communication patterns. This case illustrated the point made previously that teacher-student interaction was a two-way process. The students conditioned the teacher's behaviors as well as the teacher conditioning the students' behaviors.

In a study, therefore, which explored the adjustment of immigrant children to learning in a second culture the following should have been considered.

1. The relationship between ethnicity and teacher expectations or attitudes.

2. The relationship between ethnicity and teacher expectation mediation or behaviors.

3. The teachers conveyed their expectations or attitudes through the frequency of interaction, their non-verbal and verbal behaviors, and their task-oriented and social-emotional behaviors.

4. The teacher-student interaction was a two-way

process. The students conditioned the teachers' behaviors as well as the teachers' conditioning the students' behaviors.

5. The teachers' behaviors that were directed toward students that the teacher held in low esteem were observed by the other students in the classroom. These other students, in time, came to respond toward the student of low esteem in a manner similar to the teacher. Therefore, the relationship between the teachers' behaviors and the peers' behaviors and between ethnicity and peer-student relationship should have been examined.

Summary

The general purpose of this study was to explore the adjustment of immigrant students of ethnic-minorities to learning in Canadian schools. Schools in Canada have tended to promote programs of Canadianization and to ignore the unique language and culture of Canada's ethnic-minorities (Lind, 1974; McLeod, 1975). As a result, it was expected that schools would have been ineffective in meeting all of the educational needs of immigrant students. These students, therefore, would be at an educational disadvantage.

Researchers have reported that ethnic-minority students generally scored significantly lower on standardized achievement tests than ethnic-majority students (Baughman & Dahstrom,

1968; Coleman, et. al., 1966; Carter & Segura, 1979; Dreger & Miller, 1968). These differences became significant at least by grade 3 and stabalized or increased over the many years of schooling (Bloom, 1964; 1976; Coleman, et. al., 1966; Purves, 1973).

According to Bloom (1976), academic differences could be minimized if a teacher considered the unique history (cognitive, affective, and social interaction) of each student in his/her classroom and incorporated this knowledge into his/her teaching practices. Researchers (Carter & Segura, 1979; Hernandez, 1973; Ramirez III & Castaneda, 1974), have found significant differences between ethnic-minority students and ethnic-majority students on several cognitive, affective, and social variables that appeared to be relevant to academic achievement (Bloom, 1976). The ethnic differences have resulted mainly from two sources--the unique culture and membership in a minority group (Carter & Segura, 1979; De Vos, 1980; Hernandez, 1973; Justin, 1970; Ramirez III & Castaneda, 1974)--and have centered around seven areas--second language learning, cognitive style, self-concept, motivation, human-relations, alienation, and teacher expectations (Hernandez, 1973; Ramirez III & Castaneda, 1974; Cordova, 1970; Brophy & Good, 1974; Rist, 1970).

A review of the relevant literature in these seven areas suggested that in an investigation on the adjustment of immigrant children to learning in a second culture (the Canadian culture), the following points should have been considered.

1. The adjustment of the immigrant child should have been defined in terms of his/her academic achievement.

2. Since the feelings of alienation appeared to be related to the degree of assimilation into the second culture or the mother culture and since it appeared as if ethnic-minority children assimilated into either the mother culture or the second culture and not into both (Cordova, 1968; 1970), the variable, alienation, should have been considered as an additional measure of the adjustment of the immigrant child.

3. The
   i) level of English learning or proficiency
   ii) academic self-concept
   iii) achievement-motivational style
   iv) human-relational style
   v) peer-student relationship
   vi) teacher-student relationship and classroom interaction
   vii) feelings of alienation from school

could have been unique to ethnic-minority students and could

have been relevant to academic achievement.

4. The cognitive style (field independence/field dependence) of Alberta's ethnic-minority students was not unique to that of Alberta's ethnic-majority students (Yu, 1981).

5. The teachers' attitudes to their immigrant students and the parents' attitudes to their mother cultures and to school learning in the second culture could have related significantly to the academic achievement of the immigrant students.

6. The level of English proficiency should have been determined by the frequency of language interference errors in a child's conversation and by the level of English competence.

7. An assessment of the teachers' attitudes to their immigrant students should have included questions on the teachers' attitudes to their immigrant students as learners in their classrooms and as learners from different cultures, and to an educational policy of multiculturalism (Jaramillo, 1973; Lindsfor, 1980).

8. An assessment of the parents' attitudes to school learning in the second culture should have included questions on both their active and passive roles (Gardner, 1968).

9. When the academic self-concept of ethnic-minority children was under investigation, the researcher should have considered (a) the definition of academic self-concept and the instrumentation, (b) the relationship between academic self-concept and ethnicity and between academic self-concept and socioeconomic status, and (c) the proportion of immigrant students in the classroom.

10. Teacher-student interaction was a two-way process. The students conditioned the teacher's behaviors as well as the teacher conditioning the students' behaviors.

11. The teachers conveyed their expectations or attitudes through the frequency of interactions, their nonverbal and verbal behaviors, and their task-oriented and social-emotional behaviors.

12. The teachers' behaviors that were directed toward students that the teacher held in low esteem were observed by the other students in the classroom. These other students, in time, came to respond toward the student of low esteem in a manner similar to the teacher's. Therefore, the relationship between the teachers' behaviors and the peers' behaviors and between ethnicity and peer-student relationship should have been examined.

CHAPTER III

DEFINITIONS, HYPOTHESES, AND QUESTIONS

Definitions

The major terms of this study were defined as follows.

Immigrant Child

In most of the studies reviewed in this thesis, ethnicity was defined either in terms of mother tongue or in terms of skin color. Since the amount of exposure to the second culture could have played a role in the successful adjustment of various ethnic groups to second language learning (Hannerz, 1973; Schumann, 1978a, 1978b), immigrant child and Canadian child were defined both in terms of their mother tongue and in terms of their exposure to the Canadian culture.

An immigrant child was defined as a child (a) whose parents were born and educated outside Canada, (b) who received all of his or her schooling in Canada, and (c) who spoke a language other than English most of the time or all of the time in his or her home. An immigrant child had to meet the above three criteria.

Canadian Child

A Canadian child was a child (a) whose parents were born and educated in Canada, (b) who was born in Canada, (c) who received all of his or her schooling in Canada, and

(d) who spoke English most of the time or all of the time in his or her home. A Canadian child had to meet the above four criteria.

Culture

The term culture referred to the totality of the knowledge, both of things and of activities, of a given society or sub-society. This knowledge could be manifested in many forms including language, artistic expression, beliefs, customs, values, and institutions and is transmitted by and shared by the members of that society.

Mother Culture

The term mother culture referred to the non-English speaking culture that was taught and practiced in the homes of immigrant students.

Second Culture

The term second culture referred to the Canadian English-speaking culture that was taught and practiced within the schools.

History

The term history referred to the totality of a student's prior learning that could influence the student's present or future learning. A student's history, generally, included three critical components. These components were: (a)

cognitive entry behavior which included a student's prior learning, his/her ability to understand written instruction, his/her cognitive style or learning style; (b) affective entry behavior which included a student's interest and desire to learn, his/her academic self-concept, his/her general self-concept; and (c) the quality of the instruction or the quality of the interaction between the teacher and the student (or social interaction behavior).

Adjustment

The term adjustment was defined in terms of the score on a standardized achievement test and on an alienation instrument.

Academic Achievement

The term academic achievement was defined by the scores obtained on the vocabulary, reading comprehension, and two arithmetic subtests of the Canadian Test of Basic Skills (King, 1969).

Alienation

The term alienation was defined as a feeling of estrangement from the school system accompanied by feelings of powerlessness, normlessness, self-estrangement, and isolation. The term powerlessness referred to a "a low expectancy on the part of an individual that he can, through his own behavior,

achieve the rewards he seeks" (Cordova, 1970, p. 166). The term normlessness referred to "a high expectancy on the part of an individual that socially unapproved behaviors are required to achieve the given goals stressed by a system or collectivity (the school)" (Cordova, 1970, p. 166). The term self-estrangement referred to "a high degree of dependence of a given behavior upon anticipated future rewards that lie outside the activity itself, that aspect of self-alienation characterized by a loss of intrinsic meaning or pride in work" (Cordova, 1970, p. 166). The term isolation referred to "the tendency to assign low reward values to beliefs or goals that are highly valued in a social system (the school)" (Cordova, 1970, p. 166).

English Proficiency

The term English proficiency was defined in terms of the scores on a standardized test of English competence and of the fluency of language interference errors in a student's conversation. The term, English competence, referred to the ability of the learner to express his ideas clearly in English. This ability included some understanding of the meanings of English words and some understanding of the basic English syntax. The term, language interference, referred to the substitution of verbal and/or nonverbal

elements of the mother language into the communication in English.

Academic Self-concept

The term academic self-concept referred to "the individual's manner of describing and distinguishing himself as unique among others in terms of interactions and performances on academic school tasks" (Boersma, Chapman, & Maguire, 1978, p. 4).

Achievement-Motivational Style

The term achievement-motivational style referred to the consistent mode of achieving a personal standard of excellence. More specifically, the term includes (a) achievement for the family (a desire to achieve a goal in order to benefit the family or in order to make the family proud of the character in the story), (b) cooperation achievement (a desire to work with others as a team in order to obtain a desired goal), (c) need for personal achievement (a desire to achieve a goal through personal effort), (d) need to be accepted by someone in authority (a desire to achieve a goal in order to make the teacher, principal (someone in authority other than the family) proud of the character in the story), and (e) need for personal enjoyment (a desire to achieve a goal for personal pleasure).

Human-Relational Style

The term human-relational style referred to the consistent mode of relating to others. More specifically, the term includes (a) need affiliation (the desire to interact with others and belong to a social group), (b) need to nuture (sensitivity to other's feelings and a willingness to help others), (c) need succorance (a willingness to rely on others particularly adults for help and guidance), and (d) need to conform to authority or routine (a willingness to adhere to the social or institutional regulations or procedures).

High Achiever

The term high achiever referred to a student who obtained a grade score of 5.5 or greater on a standardized achievement test which was administered at the end of the grade four year.

Low Achiever

The term low achiever referred to a student who obtained a grade score of 4.5 or less on a standardized achievement test which was administered at the end of the grade four year.

Socioeconomic Status

In this study, the socioeconomic status of a student was defined in two different ways. Firstly, the student's socioeconomic status was established by the socioeconomic status of the school that he or she attended. Each of the

three schools under investigation were selected from one of the three socioeconomic levels established by the Edmonton Separate School System.

Secondly, the socioeconomic status of a student was defined according to the occupational ranking of the major wage earner in the family. The occupations were ranked according to the revised Socioeconomic Index for Occupations in Canada (Blishen & McRoberts, 1976). From these rankings, students were assigned to one of three socioeconomic levels. The rank limits of these three levels were determined by the six class system reported by Blishen and McRoberts (1976). In this study, the top two classes of the Blishen and McRoberts' system were collapsed to form the upper socioeconomic level; the middle two were collapsed to form the middle socioeconomic level; and the bottom two were collapsed to form the lower socioeconomic level.

Peer Relationship

The term peer relationship was defined in terms of a student's choice status on a sociometric scale and of the frequency of student-peer interaction in the classroom.

Teacher Relationship

The term teacher relationship was defined in terms of the frequency of unique teacher-student interactions and of

the percentage of those interactions that were teacher initiated.

Quality of Classroom Interaction

The phrase, quality of classroom interaction referred to the social-emotional and task-oriented variation in verbal and nonverbal behaviors found in the unique exchanges between the teacher and the students. The categorization of the variation in these behaviors were determined by two apriori observation systems, the Bales' Interaction Process Analysis (Bales, 1950; 1970) and the McLeish-Martin Coding System (McLeish & Martin, 1975).

Passive Acceptance

The term passive acceptance referred to an individual's positive regard for the mother culture or the second culture if the positive regard was expressed verbally. For example, the parents of an immigrant child would show passive acceptance of the second culture if the parents stated that they were satisfied with their child's school.

Passive Rejection

The term passive rejection referred to an individual's negative regard for the mother culture or the second culture if the negative regard was expressed verbally. For example, the teacher of an immigrant child would show passive rejection

of the mother culture if the teacher stated that all students from the mother culture were inferior to those students from the second culture.

Active Acceptance

The term active acceptance referred to an individual's positive regard for the mother culture if the positive regard was demonstrated through his/her motor behaviors. For example, the parents of an immigrant child would indicate active acceptance of the second culture if the parents helped the child with his/her homework.

Active Rejection

The term active rejection referred to an individual's negative regard for the mother culture or the second culture if the negative regard was demonstrated through his/her motor behaviors. For example, the other students in the classroom would indicate active rejection of the mother culture if they did not interact with those children from the mother culture.

Hypotheses and Questions

Hypotheses

The following hypotheses were investigated in this study. In hypotheses 1 to 11, the differences between immigrant children and the Canadian children were to be

examined. In the remaining 10 hypotheses, the relationship between the critical cognitive, affective, and social variables and the adjustment of the immigrant children to learning were to be studied.

Differences between immigrant children and Canadian children. The research literature on academic achievement and unique behaviors of ethnic-minority students (Coleman, et. al., 1966; Dreger & Miller, 1968; Hernandez, 1973; Ramirez III & Castaneda, 1974) have suggested that ethnic-minority children do differ significantly from their ethnic-majority peers on a number of behaviors. Ethnic-minority students scored significantly lower on academic achievement tests than the ethnic-majority students (Coleman, et. al., 1966). Ethnic-minority students have acquired the knowledge of the mother culture from their parents (Hernandez, 1973; Ramirez III & Castaneda, 1974). As a result of this acquisition, the ethnic-minority students may have displayed unique modes or styles of communication, human-relations, motivation, and learning (Hernandez, 1973; Ramirez III & Castaneda, 1974). Living as an ethnic-minority in a second culture may have resulted in increased feelings of alienation (Cordova, 1970; Hernandez, 1973), poor academic self-concept (Hernandez, 1973; Zirkel, 1971), different teacher

expectations or attitudes (Crowl & MacGinities, 1974), different teacher-student relationship and interactions (Brophy & Good, 1974; Jackson & Cosca, 1974), and different student-peer relationship (Rist, 1970). Since significant differences were generally expected in this study, the hypotheses were stated as follows.

1. There will be a significant difference between the immigrant child and the Canadian child on academic achievement.

2. There will be a significant difference between the immigrant child and the Canadian child on their feelings towards the school (alienation).

3. There will be a significant difference between the immigrant child and the Canadian child on English proficiency.

4. There will be a significant difference between the immigrant child and the Canadian child on academic self-concept.

5. Regardless of the cultural group, high achievers will have a more positive academic self-concept than low achievers.

6. Regardless of the socioeconomic status, high achievers will have a more positive academic self-concept than low achievers.

7. The achievement-motivational style of the immigrant child will differ significantly from the achievement-motivational style of his/her Canadian peers.

8. The human-relational style of the immigrant child will differ significantly from the human-relational style of his/her Canadian peers.

9. The relationship between the immigrant child and his/her peers will differ significantly from the relationship between the Canadian child and his/her peers.

10. There will be a significant difference between the immigrant child and the Canadian child on the teacher's relationship with his or her students.

11. There will be a significant difference between the immigrant child and the Canadian child on the quality of the classroom interaction between the target subjects and the teacher.

<u>The relationship between the critical affective and social variables and the adjustment of immigrant children to learning</u>. Since Bloom (1976) had implied that the cognitive, affective, and social interaction variables on which ethnic-minority students displayed significant differences were critical components to effective education, the hypotheses on the relationship between the cognitive, affective,

and social variables and the adjustment of the immigrant child to learning were presented below as directional hypotheses. These hypotheses, however, were tested if and only if a significant difference between the immigrant child and the Canadian child was found on the variable of interest.

12. The feelings of the immigrant child toward his or her school (alienation) will relate significantly to his or her adjustment.

13. The English proficiency of the immigrant child will relate significantly to his or her adjustment.

14. The academic self-concept of the immigrant child will relate significantly to his or her adjustment.

15. The achievement-motivational style of the immigrant child will relate significantly to his or her adjustment.

16. The human-relational style of the immigrant child will relate significantly to his or her adjustment.

17. The teacher's relationship with the immigrant child will relate significantly to the adjustment of the immigrant child.

18. The relationship between the immigrant child and his/her peers will relate significantly to the adjustment of the immigrant child.

19. The quality of the classroom interaction between

the immigrant child and the teacher will relate significantly to the adjustment of the immigrant child.

20. The teacher's relationship with the immigrant child will relate significantly to the quality of the classroom interaction between the immigrant child and the teacher.

21. The teacher's relationship with the immigrant child will relate significantly to the relationship between the immigrant child and his/her peers.

Questions

The following questions were investigated in this study. These questions dealt with the home and the school environment of the immigrant child.

1. What are the parents' attitudes to their mother culture? What are the parents' attitudes to school learning in the second culture?

2. What are the teachers' attitudes to their immigrant students as learners and as learners from different cultures? What are the teachers' attitudes to an educational policy of multiculturalism? What are the routines of teachers, peers, and school administration that could suggest active and/or passive acceptance or rejection of the immigrant child?

CHAPTER IV

EXPERIMENTAL PROCEDURE AND DESIGN

The Sample

To obtain the sample, teachers from grade 4 classrooms that were thought to contain children who would meet the criterion of immigrant child and Canadian child were contacted. Once the grade 4 teachers and the school principals had agreed to take part in the study, a criterion questionnaire (see Appendix B) was administered to the appropriate classes to determine the presence and frequency of potential immigrant and Canadian subjects. When the classroom seemed to be an appropriate source for investigation, the parents of the students were contacted by letter (see Appendix A) and/or by phone to ascertain if their children would be allowed to take part in the study. Once it had been determined which children could act as subjects, possible target immigrant subjects and possible target Canadian subjects were selected. The Lorge-Thorndike verbal, nonverbal, and full scale I.Q. scores and birthdates of the target subjects were obtained from the school records. Following this, each target immigrant child was matched with a target Canadian child on age, sex, classroom, and I.Q. scores. The subjects were matched first on classroom and sex. The immigrant

subject and his/her Canadian pair were from the same classroom and of the same sex. The subjects were then matched on age and I.Q. scores. The Canadian subjects were six months or less older or younger than their immigrant pairs, and were plus/minus 10 I.Q. points on one and frequently two (82% of the sample) of the three I.Q. scores (verbal, nonverbal, full scale). Thirty-six percent of the sample had plus/minus 10 I.Q. points on all three I.Q. scores.

A total of 22 children comprised of 11 immigrant children and 11 Canadian children took part in the study. In the immigrant sample, 4 were males and 7 were females. Of the males, one was from Czechoslovakia, one from Yugoslavia, one from South Africa, and one from Italy. Of the females, two were from Uganda, one from Portugal, one from Hungary, one from Poland, one from India, and one from Pakistan.

The total sample was selected from three grade 4 classrooms in three schools in the Edmonton Separate School System. Each school was selected from one of the three socioeconomic levels that have been established by the system. A school was assigned a socioeconomic level by the system following discussions between the system and the Edmonton Board of Health. The assignment was dependent on the percentage of "disadvantaged" students entering grade one.

Of the 22 children in the sample, 4 attended the high socio-economic level school, 12 attended the middle socioeconomic level school, and the remaining 6 attended the lower socio-economic level school. In all three classrooms, the immigrant students were in a minority. The percentage of immigrant students in the classrooms ranged from 12% to 28%.

Instruments

Academic Achievement

The vocabulary, reading comprehension and the two arithmetic (calculations and problems) subtests of the Canadian Test of Basic Skills (King, 1968) were used to assess the level of academic achievement.

The Canadian Test of Basic Skills was based on the Iowa Test of Basic Skills which was first published in 1959 and revised in 1964. The Iowa Test was constructed to test the academic achievement of children in grade 3 to grade 9 on vocabulary, reading comprehension, language, arithmetic, and work habits (Herrick, 1959; King, 1968).

The Canadian Test of Basic Skills was identical to the Iowa Test in many ways (Birch, 1972; King, 1968). The objectives, form, layout, and much of the content of the subtests were similar. However, unlike the Iowa test, the Canadian test was normed on a group of over 30,000 children

in grades 3 to 8, drawn from a stratified random sample of some 225 schools from the English speaking sector of the 10 Canadian provinces. The author claimed that the norms were truly representative of Canadian, English speaking pupils of grade 3 to 8 inclusive. Birch (1972) strongly defended this claim.

The validy of the Canadian Test of Basic Skills was discussed logically in the manual (Bay, Chan, Jurkat, Taylor-Pearce, & Nyberg, 1969). The author supplied evidence which suggested that the testmaker had gone to great lengths to represent the curricular goals of the elementary schools in Canada. Although the author has received some criticism for the selection of certain items that tested a student's knowledge of mathematical terminology and concepts, the author has also received considerable support (Bay, et. al., 1969).

The split-half reliability coefficients of the Canadian Test of Basic Skills were reported to range from .72 to .98; while the equivalent form reliability coefficients were reported to range from .62 to .95 (King, 1968). These coefficients were moderate to high. However, since the test was a speed test, these coefficients could have been somewhat inflated (Bay, et. al., 1969).

Since the Canadian Test of Basic Skills was a standardized academic achievement test and was one of the few standardized achievement tests developed with the Canadian educational system in mind, the test was used to assess the academic achievement of the students in this study. Since it has been used extensively by the Edmonton Separate School System, norms were available for the Edmonton area.

Alienation

A modified version of Cordova's alienation scale was used to determine the student's feelings toward his/her school (alienation) (See Appendix B). Cordova's alienation scale (Cordova, 1968) was a research scale of alienation and was one of the few scales of alienation developed to investigate the feelings of estrangement (toward school) among elementary, ethnic-minority students.

Cordova's alienation scale was based on Winslow's scale of alienation (Winslow, 1967; 1968). The latter scale was constructed to study educational alienation among delinquent high-school students and it yielded four variants of alienation: powerlessness, normlessness, self-estrangement, and isolation. Cordova's scale of alienation was identical to the Winslow scale in several ways. The statements used in the scales were similar, the methods of

administration were similar, and the variants of alienation were unchanged; however, unlike the Winslow scale which used a forced-choice response system with two categories, the Cordova scale used a forced-choice response system with five categories. Cordova (1968) argued that the two categorization system used by Winslow did not allow for sufficient range of answers to discriminate adequately among subjects.

Since Cordova's scale of alienation was developed to investigate the feelings of estrangement toward school among sixth-grade, ethnic-minority students and not among fourth-grade ethnic-minority students, a modified version of Cordova's alienation scale was used in this study.

To modify the Cordova scale, the researcher referred to the word lists of Stothers, Jackson, and Minkler (1947) and Wepman and Hass (1969) to assess the level of language difficulty for students in grade 4. Once this had been determined, the statements were revised to reduce the level of word difficulty. Following this, the original Cordova alienation scale and the revised Cordova alienation scale were given to two educators who had experience teaching elementary school children and who had access to a few students in grade 4. These educators were asked for

feedback on the difficulties encountered by grade 4 students when they answered the questions on the two scales and for feedback on the variations in the meaning of statements between the two scales. From the feedback, the revised Cordova alienation scale was amended again and then was administered to the children in a pilot study. Since these children appeared to have little difficulty with the second revised instrument, it was used in the final study. This second revised instrument contained 46 Likert type items with three categories of responses, true, sometimes true, and false.

English Proficiency

In this study, English proficiency was determined by a student's level of English competence, and by the frequency of language interference errors in an immigrant student's conversation.

To assess a student's level of English competence, the verbal expressions subtest of the revised Illinois Test of Psycholinguistic Abilities (ITPA) was used. The ITPA (Paraskevopoulos & Kirk, 1969) was developed as a diagnostic tool of psychological and linguistic functioning and consisted of 9 subtests, one of which was the verbal expressions subtest. The verbal expressions subtest was one of the two

subtests used to assess an individual's ability to encode. More specifically, the subtest was used to assess a child's ability to express his English concepts verbally. The child was shown four familiar objects, one at a time and was asked: "Tell me all about this." The score for the subtest was the number of discrete, relevant, and approximately factual concepts expressed verbally.

From the accumulation of data on the verbal expressions subtest between 1961 and 1969 (Paraskevopoulos & Kirk, 1969), the median internal consistency coefficient for the eight age groups (between 2 years 7 months and 10 years 1 month) of average children was found to be .85. The stability coefficients for the three age groups (4 years, 6 years, and 8 years) over a five month period was reported to be .74, .63, and .74 respectively. The difference scores between the verbal expressions subtest and the other eight subtests had median correlation coefficiences ranging from .70 to .86; while, the inter-correlation coefficients between the verbal expressions subtest and the other subtests ranged from .08 to .40. The highest inter-correlation coefficients were with the auditory association subtest and with the manual expression subtest. Finally, the interscorer reliabilities for both experienced and novice scorers were .98

and .99 respectively.

Scaled scores were available for the verbal expressions subtest. To obtain these scores, the revised ITPA was normed on a sample of 962 American children between 2 years 7 months and 10 years 1 month. The sample was selected from 17 middle income schools in 5 communities in the midwest. Of the 962 children, half were males and half were females. All of the children were of average intelligence. Ninety-six percent of the sample were white, while 4% were black. From the data, scaled scores were determined for eight age groups.

Although the revised ITPA has been criticized for a lack of validity studies and for the limitation of the norming sample (Compton, 1980; Sedlak & Wiener, 1973), the verbal expressions subtest of the revised ITPA was used as one of the tests for English proficiency. In the literature on oral language proficiency and academic success presented previously under the heading of "Competence in the Second Language" it was suggested that in order to succeed academically a second language learner must have an adequate understanding of the meanings of words and of the basic syntax so that he/she could express his/her ideas clearly (Aiken, 1972). Since the verbal expression subtest appeared to be

one of the few standardized instruments that assessed a student's understanding of basic English concepts and that was administered in a manner that could illustrate a student's understanding of basic English syntax, this subtest was selected to assess a student's level of English competence.

In addition to the verbal expression subtest of the ITPA, the level of English proficiency was assessed by the frequency of language interference errors in the immigrant subjects' conversations present in the observational data. Language interference errors occurred when an immigrant child attempted to communicate in English but substituted elements of his/her mother language into the conversation. The frequency of language interference errors was determined through a consensus of two raters.

Classroom Interaction

The Bales' Interaction Process Analysis (Bales, 1950; 1970) was one of the instruments used to analyze the quality of the classroom interaction between the teacher and the target subjects. The Bales' Interaction Process Analysis (IPA) was an apriori observation system developed to enable an observer to record the social interaction of a small group. According to Bales (1950),

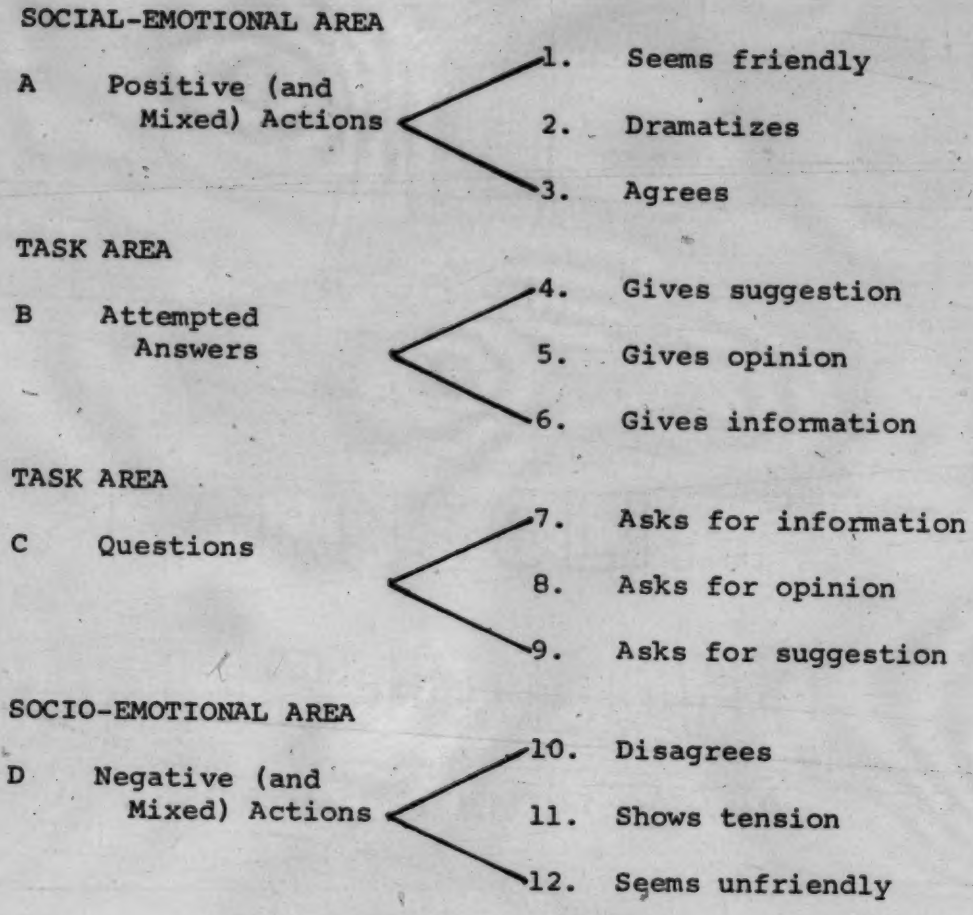
> a small group is defined as any number of persons engaged in interaction with each other in a single face-to-face meeting or a series of meetings, in which each member receives some impression or perception of each other member distinct enough so that he can, either at the time or in later questioning, give some reaction to each of the others as an individual person, even though it be only to recall the other was present. (p. 33)

Thus, teacher and student and/or student and student could constitute small groups.

In order to effectively analyze group interaction, Bales (1970) has constructed a set of 12 mutually-exclusive categories as illustrated in Figure 2. The initial three categories (1, 2, and 3) were concerned with the positive social-emotional aspects of interaction while the last three (10, 11, and 12) were concerned with the negative social-emotional aspects. The six central categories, the task categories, were emotionally neutral categories and were comprised of giving answers (4, 5, and 6) and asking questions (7, 8, and 9). The set of categories was meant to be all inclusive so that every act observed could be recorded under a defined category. In addition, the method was made continuous in that the observer was required to classify each act he observed as it occurred in a sequence; however, what a person said or did was not recorded as to

FIGURE 2

BALES' INTERACTION PROCESS ANALYSIS



Bales, R. F. Personality and interpersonal behavior. New York: Holt, Rinehart, and Winston, 1970.

content but as to its effect on the interaction process. When scoring, nonverbal as well as verbal behaviors were scored. Each group member was scored separately.

Much of the research that has accumulated on the IPA has centered around the observation of social behaviors in adult groups (Bales, Strodtbeck, Mills, & Roseborough, 1971; Burke, 1974; Butler & Cureton, 1973; Emiley, 1975; Heinicke & Bales, 1953; Levine, 1973; Matteson, 1971; Psathas, 1960; Sermat, 1970; Slater, 1955). The results of these studies have suggested that newly formed adult groups tend in the course of time to develop relatively stable patterns of interaction. Certain investigators have gone as far as to attempt to fit the interaction profiles to mathematical distributions (Burke, 1974; Stanford & Roard, 1974).

Despite the general acclaim that the IPA can be applied to a variety of social interactions (Weick, 1968) and the recommendation that the IPA could be used to classify teachers' verbal behaviors (Wiseman & Aron, 1970) the system has been used only recently to investigate teacher-student interaction. Bryan (1974) and Bryan and Wheeler (1972) used the IPA to study the classroom interaction between teachers and learning disabled children and between teachers and normal children. The results were discussed with

references to the differences between the classroom interaction with learning disabled children and with normal children. These results suggested that the IPA was sensitive to variations in the quality of teacher-student interaction.

Another instrument that was used to analyze the quality of the classroom interaction between teacher and the target subjects was the McLeish-Martin Coding System (McLeish & Martin, 1975). This coding system (M-M) was an apriori observation system based on the verbal operants defined by Skinner (1957) and supplemented by the affect categories from the Bales' Interaction Process Analysis. The system consisted of a set of 10 categories (See Figure 3). Coding was based on a functional analysis of overt behaviors. According to McLeish (1978) and McLeish and Martin (1975), each act was conceptualized as a complex mixture and/or sequence of verbal and nonverbal interactions. In coding, attention was paid to "each overt act as an integral unit of verbal and nonverbal components" [interactions] (McLeish, 1978; p. 215). In other words, each act was coded according to the specific function or purpose it performed in the mixture or sequence of interaction. The M-M has been used to analyze the interaction of psycho-therapy groups (McLeish

FIGURE 3

MCLEISH-MARTIN CODING SYSTEM

1. Mand
2. Tact
3. Extended Tact
4. Echoic
5. Intraverbals
6. Dominant Control
7. Negative Affective
8. Informative Autoclitics
9. Submissive Control
10. Positive Affective

McLeish, J., & Martin, J. Verbal behavior: A review and experimental analysis. Journal of General Psychology, 1975, 93, 3-66.

& Martin, 1975), teacher training sessions (Oddie, 1976), and teacher and student exchanges (McLeish, 1978). The results of these studies suggested that the M-M was sensitive to variations in the quality of social interaction.

Achievement-Motivational Style and Human-Relational Style

The School Situations Picture Stories Technique (Ramirez III & Castaneda, 1974) was used to assess the achievement-motivational and the human-relational styles of the target subjects. The School Situations Picture Stories Technique (SSPST) consisted of a set of 7 drawings each depicting a person or persons in an educational setting. The drawings are as follows.

1. student and teacher
2. student and mother
3. student and father
4. two students of the same ethnic group
5. two students of different ethnic groups
6. student, parents, and principal
7. student studying alone

During testing, the children were asked to tell a story about each of the pictures. The composition of the story was influenced by three given questions: (a) What is happening?

(b) What happened before? (c) How will the story end? The SSPST was specifically developed to research the achievement-motivational styles and human-relational styles of Mexican-American and American children (Ramirez III & Castaneda, 1974).

In scoring for achievement-motivational style and human-relational style, an abbreviated version of the scoring system devised by McClelland and his colleagues (1953) was used. Under this system, points were given for themes that appeared in the stories. For example, if a subject made references to a certain goal related to a particular motive such as achievement, affiliation, aggression (i.e., Joe wants to be a lawyer) he received a point. Points were also given for themes of need achievement (i.e., Judy wants her parents to be proud of her), cooperate achievement (i.e., Roberto wants his team to be champs in the baseball league), and conflict (i.e., Susan was very afraid that her teacher would be angry) to name a few. (For scoring, see Appendix C.)

Academic Self-concept

The Students' Perception of Ability Scale (Boersma & Chapman, 1978a; 1978b; Boersma, Chapman, & Maguire, 1978; Chapman & Boersma, 1979) was used to assess the academic

self-concept of the target subjects. The Students' Perception of Ability Scale (SPAS) was designed to assess the academic self-concept of children in grade 3 to grade 6. The SPAS contained 70 forced choice "Yes-No" items from five major subject areas (reading, spelling, language arts, arithmetic, and penmanship). It yielded 7 scores (composite score, perception of general ability, perception of arithmetic ability, general school satisfaction, perception of reading and spelling ability, perception of penmanship and neatness, and confidence in academic ability). The estimates of internal consistency of the SPAS summed over grades 3, 4, 5, and 6 were determined by Cronbach's alpha. The alpha for the full scale was .915 while the median alpha for the subscales was .803. The full scale test-retest reliability over a 4 to 6 week period was .834 while the median stability coefficient for the subscales was .765. Research that compared the scores of the SPAS with the scores on a test of general self-concept indicated that the SPAS has discrimination validity. It appeared to be tapping something quite different than general self-concept (Chapman & Boersma, 1979).

Teacher Attitude

A questionnaire was used in this study to collect data

on the attitudes of the teacher toward his/her immigrant students as learners and as learners from different cultures, on the attitudes of the teacher toward an educational policy of multiculturalism, and on the routines of teacher, peers, and school administration that could suggest active and/or passive acceptance or rejection of immigrant students. (See Appendix B.) The questionnaire consisted of 16 open-ended and close-ended questions. Fifteen of the questions were selected from the Questionnaire for Teachers of New Canadian Children developed by Ashworth (1975) and published in the book Immigrant Children and Canadian Schools. The remaining question, question #5, was included to cover the unique needs of the study. To determine the appropriateness of the questionnaire, copies were given to 15 teachers in the Edmonton school systems. They were informed that this was an assessment study and that any suggestions on wording and format would be appreciated. From the responses and comments on the 10 returns, the questionnaire was revised. This revised questionnaire was used in the study. Since the questions taken from the Ashworth questionnaire used the term "New Canadian Child" instead of immigrant child, a definition for New Canadian Child accompanied the study questionnaire. The definition for New Canadian Child was

exactly the same as the study definition for immigrant child.

Teacher Relationship

To assess the relationship between the teacher and his/her students, the frequency of interaction between the teacher and the target subjects was determined from the observational data. In addition, the frequency of teacher initiated interactions between the teacher and the target subjects was calculated. An interaction was considered to be teacher initiated if the teacher directed any verbal or nonverbal behaviors toward a target child without the child requesting the interaction first by asking a question or by putting up his or her hand. (See General Rules in Appendix C.)

Peer Relationship

A three-choice, three criteria sociometric scale (Cohen, 1976; Rushton, 1967) was one of the instruments used to assess the relationship between the target subjects and their peers. This scale consisted of a set of three questions about friendship choices. The questions were as follows.

1. When you have some work to do in the classroom, who are the boys and girls you like to have sitting near you?

2. Who are the boys and girls you like to be with when you are taking part in your hobby?

3. Who are the boys and girls you would like to invite to your home?

To score the data, the frequency with which a target subject was chosen in the three questions by each of his/her peers was determined. All choices were given equal weight.

In addition to the sociometric scale, peer relationship was assessed by the frequency of interaction between the target subjects and their peers. An interaction was considered to have occurred if the target subject and the peer or peers exchanged words, made eye contact, or made physical contact. (See General Rules in Appendix C.)

Parent Attitude

A questionnaire was used to ascertain the attitudes of immigrant parents toward the school learning in a second culture and toward their mother culture. The questionnaire (see Appendix B) consisted of 24 open-ended and close-ended questions. Fifteen of the questions were selected in whole or in part from the questionnaires of Bynner (1972) and Lynch and Pimlott (1976) on parents' views on education. The remaining three questions which dealt with the parents' views on culture, were included to cover the unique needs

of the study.

To determine the appropriateness of the questionnaire, copies were distributed to two educators and several adults in the public sector. They were asked for feedback on the wording, format, and missed information. From the comments and suggestions, the questionnaire was revised. The revised questionnaire was then used in the study.

Socioeconomic Level

The revised Socioeconomic Index for Occupations in Canada (Blishen & McRoberts, 1976) was used to define the socioeconomic level of the subjects in this study. The index included 500 occupations ranked in terms of the educational and income characteristics of major wage earners obtained from the 1971 Canadian census. A regression analysis of the Pineo-Porter prestige scores (Pineo & Porter, 1967) of 102 occupations determined the regression weights for education and income. Since it was assumed by the authors that a family's socioeconomic status was dependent upon the occupation of the husband rather than the wife when both were working, only occupations characterizing the male labor force were ranked.

In this study, information on the occupation of the major wage earner was requested.

Intelligence Test

The Canadian Lorge-Thorndike Intelligence Test (CL-T) was used to match the immigrant subjects with the Canadian subjects on intelligence scores. The CL-T (Lorge, Thorndike, Hagen, & Wright, 1967; Wright, Thorndike, & Hagen, 1972) was a group intelligence test developed to assess the abstract intellectual abilities of children in grade 3 to grade 13. The test yielded three scores, a verbal intelligence score, a nonverbal intelligence score, and a composite intelligence score.

The CL-T was a modified form of the Lorge-Thorndike Intelligence Test, multi-level edition (L-T), which was first published in the United States in 1963 (Tittle, 1972). The CL-T was almost identical to the L-T. Only two items were modified for the Canadian school population. This limited modification, the authors argued, reflected the care taken with the original L-T construction. In addition, the CL-T was standardized on a stratified random sample of 31,739 English speaking Canadian students in grade 3 to grade 9 (Lorge, et. al., 1967). Due to the Canada-wide standardization study (Wright, et. al., 1972) and to its extensive use by the Edmonton Separate School System, norms were available for the Edmonton area.

Standardized intelligence tests generally have been considered to be biased and unfair to persons from cultural minorities (Horn, 1979; Laosa, 1977; Olson, 1976). It has been argued that intelligence tests tended to reflect the values and attitudes of the ethnic-majority and therefore, placed persons from ethnic-minorities at a disadvantage. The authors of the CL-T recognized the problem (Wright, et. al., 1972) and suggested that verbal tests may be inadequate in assessing the intellectual abilities of students who have English as a second language. Since all five subtests of the verbal battery of the CL-T were verbal tests, researchers have suggested that the nonverbal subtests would have greater predictive validity of school achievement for minority groups. With this in mind MacArthur and his colleagues (MacArthur, 1968; Olson & MacArthur, 1962; Rattan & MacArthur, 1968; West & MacArthur, 1964) compared the nonverbal intelligence scores of the L-T with the intelligence scores of several "culturally free" intelligence tests on predicting the school achievement of cultural minority students. The results of these studies showed that the nonverbal intelligence scores of the L-T were good predictors of school achievement for minority students. Unfortunately, MacArthur and his colleagues did not include the L-T

verbal subtests for comparison. Unlike MacArthur and his colleagues, Ward and his colleagues (Tittle, 1972) did compare the verbal scores of the L-T with the nonverbal scores of the L-T on the predictive validity of school achievement in black American students. According to Tittle (1972), they found that the nonverbal score was less effective in predicting school achievement than the verbal score. Tittle (1972) also reported on another cross-cultural study in which the verbal scores of the L-T and the nonverbal scores of the L-T correlated similarly to school marks for Nigerian students. In light of the investigations, all three scores of the CL-T were used to match the immigrant students with a Canadian partner in this study.

Procedure

Prior to the major study, a pilot study was conducted to determine the feasibility of the study, the sampling procedure, the study procedure, and the data analysis. Following the pilot study the researcher proceeded to collect the data for the major study. In order to collect the data, the researcher visited the three schools for a two week period starting in February, 1980 and ending in May, 1980. During that time, the subjects were videotaped and were tested. The videotaping took place during their

language arts period. Since the language arts period was concerned predominantly with the development of effective oral and written language (Chambers & Lowry, 1975), it was anticipated that during this period, all students would be encouraged to use their oral language skills.

The subjects were videotaped for a two week period. To minimize distortions in classroom activities due to the presence of an observer and the videotaping equipment (Borg & Gall, 1971; Gellert, 1955; Herbert, 1970; Lutz & Ramsey, 1974; Mercatoris & Craighead, 1974; Samph, 1976; Wilson, 1977), the equipment was concealed in a wooden box and placed at the back of the room. The observer sat beside the box and remained there during the videotaping sessions. Her job was to switch the equipment on at the beginning of the language arts period and to switch it off at the end of the period. It has been suggested that distortions can be minimized by allowing subjects time to habituate to the presence of an observer and the equipment (Medley & Mitzel, 1963). Because some researchers (Johnson & Bolstad, 1975; Mercatoris & Craighead, 1974) have suggested that teachers appeared to resensitize to observation periodically even when an habituation time of 5 to 10 days was allowed, this study considered the suggestion. Only the data from

the second week of videotaping was used in the data analysis.

In addition, the various tests were administered to the target subjects and their teachers during the two week period. The class tests (Students' Perception of Ability Scale, sociometric scale) were administered first, followed by the target group tests (the alienation scale), and finally the individual tests (the School Situation Picture Stories Technique, the verbal expressions subtest of the ITPA).

The class tests were given in a fixed order. The Students' Perception of Ability Scale was administered first followed by the sociometric scale. All class test questions were read aloud to the class by the examiner.

The order of presentation of the individual tests were randomly determined for each matched pair of subjects. The responses to the SSPST were tape-recorded and later transcribed. The replies to the verbal expressions test of the ITPA were recorded during the assessment period.

The teacher attitude questionnaire was given to the teacher at the beginning of the two week period and collected at the end of the same period.

Since the Edmonton Separate School System administered the Lorge-Thorndike Intelligence Test to all their grade 4

students in October and the vocabulary, reading comprehension, and the two arithmetic subtests of the Canadian Test of Basic Skills in May, these scores were collected from the school record.

Following the school visits, the parents of the target immigrant children were contacted by phone. The parent attitude questionnaire was administered over the phone by the researcher. Out of a possible 10 responses (2 of the immigrant children were sisters) 6 volunteered to answer the questions. Out of the remaining 4 parents, 1 refused to answer the questions, 2 had unlisted numbers, and the last was not able to be reached by phone.

Videotaped Data Analysis

Only the videotaped data from the second week of observation was analyzed. The analysis included six steps which are outlined below.

1. The observer determined the frequency of the interactions between the target subjects and their teachers.

2. The observer determined which of the teacher-subject interactions were teacher initiated.

3. The observer analyzed the quality of the interactions between the target subjects and their teachers according to the IPA and the M-M observational systems.

4. The observer determined the frequency of interactions between the target subjects and their peers.

5. The observer determined the frequency of language interference in the speech of target immigrant subjects.

Rater Training Procedures

Two raters, one of whom was the researcher, had been trained in the use of the Bales' Interaction Process Analysis (IPA) and the McLeish-Martin Coding System (M-M). Prior to the analysis of the videotapes, the researcher and the other rater met to discuss the study. At the time, several sequences from the taped data were viewed. The raters then underwent a brainstorming session in which the observed behaviors were scored according to the IPA and the M-M. Behaviors that were not readily classified were discussed. The coding of such behaviors were outlined by the group and were recorded. Following this, transcripts of coding were drawn up and were made available to the raters for future reference. (See Appendix C for transcripts.)

During the session, the raters also discussed the rules on what constituted a scorable interaction. Only those unique interactions between the teacher and the target subjects were to be scored. In addition, the raters covered the

rules on when a scorable interaction started and ended, when a scorable interaction was considered to be teacher initiated, and what constituted a peer interaction. The literature on language interference errors was discussed as well. Following the session, a list of the rules was drawn up and was made available for future reference. (see Appendix C for list of general rules.)

The raters analyzed a one hour videotape from the pilot study when the training session was completed. From the data, the interscorer reliability was determined for all aspects of observational analysis. The interscorer agreements for the pilot tape were as follows.

1. Both raters agreed that there were no indications of language interference errors.

2. In the case of frequencies of peer interaction, the ratio for the immigrant child was 8:10; while, the ratio for the Canadian child was 1:1.

3. In the case of the frequencies for teacher initiated scorable interactions, the ratio for the immigrant child was 5:5; while, the ratio for the Canadian child was 1:1.

4. In the case of the qualitative analysis of scorable interactions, the interscorable reliabilities, as calculated

using the Pearson product-moment correlation coefficient, were as follows.

i) For the IPA, the coefficient for teacher was .988; the coefficient for the immigrant child was .949; the coefficient for the Canadian child was .913.

ii) For the M-M, the coefficient for teacher was .893; the coefficient for the immigrant child was .845; the coefficient for the Canadian child was .882.

According to Heinicke and Bales (1953) and Bales (1968) the Pearson product-moment correlation coefficient was an acceptable means of determining interscorer reliability. When this analysis was used, the suggested criterion of acceptance was .80.

Since all of the interscorer agreements were within the level of acceptance, the raters were allowed to score the videotaped data of the study. This consisted of approximately 3.07 hours of videotaped data for the upper socioeconomic level school, 1.78 hours for the middle socioeconomic level school, and 3.47 hours for the lower socioeconomic level school. (There were 5 days of videotaped data for the upper socioeconomic level school, 3 days of videotaped data for the middle socioeconomic level school, and 4 days of

videotaped data for the lower socioeconomic level school.)

Transcripts of the significant interactions between the teacher and the target subjects were provided for all the taped data. They included an indication of the frequency of interactions between the target subjects and their peers. The rater was asked to check the accuracy of these frequency counts.

The transcripts were to guide the rater with the coding, without restricting her. For instance, if the rater observed an interaction between the teacher and a target subject which she thought was scorable but which did not appear on the transcript, the rater was expected to code the interaction and note it on the transcript.

In the final analysis, one rater scored approximately 2.10 hours of data on the upper socioeconomic level school, 1.00 hour of the data on the middle socioeconomic level school, and 2.57 hours of the data on the lower level socioeconomic school. The other rater scored approximately 1.00, 1.00, and 1.00 hours respectively.

At the end of the coding period a further check of interscorer reliability on the IPA and the M-M was done.

The interscorer coefficients were as follows.

1. For the IPA, the Pearson product-moment correlation coefficient was .998 for the teacher, .985 for the immigrant child, and .987 for the Canadian child.

2. For the M-M, the coefficient was .997 for the teacher, .983 for the immigrant child, and .995 for the Canadian child.

These coefficients were the same or higher than the training coefficients. This suggested that the agreement between the raters on the coding increased as the two raters worked with the data.

Statistical Analysis of the Data

Since 11 immigrant students and 11 Canadian students took part in this study and since a number of the measured variables were ordinal variables, all hypotheses were tested using non-parametric statistics (Edwards, 1974; Ferguson, 1971).

To test the differences between the immigrant subjects and the Canadian subjects and between the upper, middle, and lower socioeconomic groups, a Kruskal-Wallis one-way analysis of variance by rank was used. Generally when the Kruskal-Wallis analysis of variance is used to test a hypothesis, its function is to determine if the two samples come

from the same population distribution. If however, it can be assumed that the two samples come from population distributions with equivalent shapes and variances, then this statistic can be used as a test of central tendency (Ferguson, 1971).

To test the relationship between the affective and social variables and the adjustment variables, a Spearman's coefficient of rank correlation was calculated (Ferguson, 1971).

Limitations of the Study

1. The sample size was small. Only 11 immigrant subjects and 11 Canadian subjects took part in the study.

2. The immigrant subjects were matched with a Canadian subject; therefore, the study was limited by the problems of a matched sample (Hopkins, 1969; Stanley, 1967).

3. The schools were not selected at random from appropriate schools in each of the three socioeconomic levels. Instead, schools that were thought to contain children who met the criteria for immigrant child and Canadian child were contacted until three schools, one from each of the three socioeconomic levels, agreed to take part. In addition, the sample of immigrant children and Canadian children were not selected from all possible students in

the classroom but from the final group of students whose parents allowed them to take part in the study. Therefore, the study was limited by the restrictions of a volunteer sample (Rosenthal & Rosnow, 1975).

4. Differences in classroom activities and teacher style of teaching were apparent. Such variations would probably influence the classroom interaction (Marshall, Hartsough, Green, & Lawrence, 1977; McGraw, Wardrop, & Bunda, 1972; Peak, 1953).

5. During the videotaping session, only one camera was used; therefore, the target subjects were not observed with equal clarity.

6. Since both a camera and the researcher were present during the videotaping sessions, distortions in classroom activities were likely (Borg & Gall, 1971; Gellert, 1955; Herbert, 1970; Lutz & Ramsey, 1974; Mercatoris & Craighead, 1974; Samph, 1976; Wilson, 1977).

7. The alienation scale, the teacher attitude questionnaire, and the parent attitude questionnaire were not investigated extensively to determine their validity and reliability.

CHAPTER V

RESULTS

In this chapter, the results of the study are presented. The hypotheses on the differences between the immigrant children and the Canadian children were tested first. Following this, the hypotheses on the relationship between the critical cognitive, affective, and social variables and the adjustment of immigrant children to learning were considered. The chapter ends with an exploration of the parent attitudes to their mother culture and to school learning in the second culture and an exploration of the teacher's attitudes to his/her immigrant students.

Differences Between Immigrant Children and Canadian Children

To test hypotheses 1 to 11 Kruskal-Wallis one-way analyses of variance by rank were performed. The results were reported in Tables 1 to 14. The obtained values for the tests were not significant at a probability level of .05; therefore, all of the 11 hypotheses were rejected. The immigrant subjects did not differ significantly from the Canadian subjects on any of the cognitive, social, affective, and adjustment variables under investigation.

TABLE 1

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

ACADEMIC ACHIEVEMENT

Academic Achievement	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Reading	101.00	152.00	1.00	2.80	2.90
Vocabulary	109.00	44.00	1.00	1.32	1.33
Arithmetic calculation	112.00	141.00	1.00	0.91	0.91
Arithmetic problems	113.50	117.50	1.00	0.28	0.28

Note. X^2 (df = 1) = 3.84, $p < .05$.
X^2 (df = 1) = 6.64, $p < .01$.

H-1--There will be a significant difference between the immigrant child and the Canadian child on academic achievement.

TABLE 2

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

ALIENATION

Alienation	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Powerlessness	137.00	116.00	1.00	0.48	0.50
Self-estrangement	112.50	140.50	1.00	0.85	0.85
Isolation	122.00	131.00	1.00	0.09	0.09
Normlessness	135.00	118.00	1.00	0.31	0.32
Alienation (Total)	127.00	126.00	1.00	0.00	0.00

Note. x^2 (df = 1) = 3.84, $p < .05$.
x^2 (df = 1) = 6.64, $p < .01$.

H-2--There will be a significant difference between the immigrant child and the Canadian child on their feelings toward their school (alienation).

TABLE 3

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

ENGLISH PROFICIENCY

English Proficiency	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Verbal Expression (ITPA)	109.50	143.50	1.00	1.25	1.25
Language Interference	132.00	121.00	1.00	0.13	1.00

Note. X^2 (df = 1) = 3.84, $p < .05$.
X^2 (df = 1) = 6.64, $p < .01$.

H-3--There will be a significant difference between the immigrant child and the Canadian child on English proficiency.

TABLE 4

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

ACADEMIC SELF-CONCEPT

Academic Self-Concept	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Composite Score	131.00	122.00	1.00	0.09	0.09
General Ability	126.00	127.00	1.00	0.00	0.00
Arithmetic Ability	144.50	108.50	1.00	1.40	1.43
General School Satisfaction	138.50	114.50	1.00	0.62	0.65
Reading & Spelling Ability	128.50	124.50	1.00	0.02	0.02
Penmanship & Neatness	137.00	116.00	1.00	0.48	0.48
Confidence of Academic Ability	134.50	118.50	1.00	0.28	0.29

Note. X^2 (df = 1) = 3.84, $p < .05$.
X^2 (df = 1) = 6.64, $p < .01$.

H-4--There will be a significant difference between the immigrant child and the Canadian child on academic self-concept.

TABLE 5

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

ACADEMIC SELF-CONCEPT COMPOSITE SCORE FOR HIGH (HA) AND LOW (LA) ACHIEVERS

FROM TWO ETHNIC GROUPS

Academic Achievement	Sums of Ranks: Immigrant HA	Immigrant LA	Canadian HA	Canadian LA	df	H	Corrected H
Reading	17.50	74.00	41.00	20.50	3	0.52	0.53
Vocabulary	13.00	20.00	33.00	25.00	3	4.45	4.50
Arithmetic Calculations	18.50	81.00	25.00	65.50	3	1.33	1.35
Arithmetic Problems	13.00	51.00	25.00	47.00	3	1.74	1.80

Note. X^2 (df = 3) = 7.82, $p < .05$.
X^2 (df = 3) = 11.34, $p < .01$.

H-5--Regardless of the cultural group, high achievers will have a more positive academic self-concept than low achievers.

TABLE 6

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

ACADEMIC SELF-CONCEPT COMPOSITE SCORE FOR HIGH (HA) AND LOW (LA) ACHIEVERS

FROM THE THREE SOCIOECONOMIC LEVELS OF THE SCHOOLS

Academic Achievement	Sums of Ranks								
	Upper		Middle		Lower				
	HA	LA	HA	LA	HA	LA	df	H	Corrected H
Reading	46.00		12.50	53.00		41.50	3	1.68	1.70
Vocabulary	34.00		12.00	31.00		14.00	3	3.57	3.61
Arithmetic Calculations	37.50		6.00	87.50		59.00	3	1.12	1.14
Arithmetic Problems	38.00			64.00		34.00	2	2.01	2.07

Note. X^2 (df = 3) = 7.82, $p < .05$.
X^2 (df = 3) = 11.34, $p < .01$.
X^2 (df = 2) = 5.99, $p < .05$.
X^2 (df = 2) = 9.21, $p < .01$.

H-6--Regardless of the socioeconomic status, high achievers will have a more positive academic self-concept than low achievers (Tables 6 & 7).

TABLE 7

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

ACADEMIC SELF-CONCEPT COMPOSITE SCORE FOR HIGH (HA) AND LOW (LA) ACHIEVERS

FROM THE THREE SOCIOECONOMIC LEVELS OF THE MAJOR WAGE EARNERS

Academic Achievement	Sums of Ranks Upper HA	Upper LA	Middle HA	Middle LA	Lower HA	Lower LA	df	H	Corrected H
Reading	10.50	15.00	33.50		11.00	66.00	4	4.17	4.23
Vocabulary	7.50		19.50	7.00	16.00	28.00	4	3.74	3.76
Arithmetic Calculations	10.00		7.00	1.00	13.00	112.00	4	-3.81	-3.83
Arithmetic Problems	7.50		21.50	6.00	4.00	66.00	4	4.48	4.58

Note. X^2 (df = 4) = 9.49, $p < .05$.
X^2 (df = 4) = 13.28, $p < .01$.

TABLE 8

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

ACHIEVEMENT-MOTIVATIONAL (A-M) AND

HUMAN-RELATIONAL (H-R) STYLES

A-M & H-R Styles	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Achievement for Family	138.00	115.00	1.00	0.57	0.63
Cooperative Achievement	115.50	137.50	1.00	0.52	2.10
Need for Personal Achievement	125.00	128.00	1.00	0.01	0.01
Need to be Accepted by Authority	121.00	132.00	1.00	0.13	0.25
Need for Personal Enjoyment	137.50	115.00	1.00	0.52	1.17
Need Affiliation	139.00	114.00	1.00	0.67	0.78
Need to Nuture	112.50	140.50	1.00	0.85	1.38
Need Succorance	138.50	114.50	1.00	0.62	0.71
Need to Conform	125.00	128.00	1.00	0.01	0.01
Conflict	120.00	133.00	1.00	0.18	0.20
Culture	121.00	132.00	1.00	0.13	0.37

Note: X^2 (df = 1) = 3.84, $p < .05$.
X^2 (df = 1) = 6.64, $p < .01$.

H-7--The achievement-motivational style of the immigrant child will differ significantly from the achievement-motivational style of his Canadian peers.

H-8--The human-relational style of the immigrant child will differ significantly from the human-relational style of his Canadian peers.

TABLE 9

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

PEER RELATIONSHIP

Peer Relationship	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Sociometric Scale	143.00	110.00	1.00	1.17	1.20
Frequency of interactions between target students & peers	104.00	106.00	1.00	0.01	0.01

Note. X^2 (df = 1) = 3.84, $p < .05$.
X^2 (df = 1) = 6.64, $p < .01$.

H-9--The relationship between the immigrant child and his peers will differ significantly from the relationship between the Canadian child and his peers.

TABLE 10

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

TEACHER RELATIONSHIP

Teacher Relationship	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Frequency of teacher iniated interactions between teacher & student	98.00	112.00	1.00	0.28	0.28
Frequency of interactions between teacher & student	105.00	105.00	1.00	-0.00	-0.00

Note. X^2 (df = 1) = 3.84, $p < .05$.
X^2 (df = 1) = 6.64, $p < .01$.

H-10--There will be a significant difference between the immigrant child and the Canadian child on the teacher's relationship with his or her students.

TABLE 11

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

BALES' INTERACTION PROCESS ANALYSIS FOR TEACHER

Bales' Categories	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Seems Friendly	109.00	101.00	1.00	0.09	0.09
Dramatizes	95.00	115.00	1.00	0.57	0.59
Agrees	128.50	81.50	1.00	3.16	3.25
Gives Suggestion	112.50	97.50	1.00	0.32	0.33
Gives Opinion	87.00	123.00	1.00	1.85	1.91
Gives Information	109.50	100.50	1.00	0.12	0.12
Asks for Information	109.50	104.50	1.00	0.00	0.00
Asks for Opinion	105.50	101.00	1.00	0.09	0.09
Asks for Suggestion	109.00	101.00	1.00	0.09	0.11
Disagrees	105.00	105.00	1.00	-0.00	-0.00
Shows Tension	94.50	115.50	1.00	0.63	0.66
Seems Negative	94.00	116.00	1.00	0.69	0.72

Note. X^2 (df = 1) = 3.84, $p < .05$.
X^2 (df = 1) = 6.64, $p < .01$

H-11--There will be a significant difference between the immigrant child and the Canadian child on the quality of the classroom interaction between the target subjects and the teacher (Tables 11-14).

TABLE 12

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

MCLEISH-MARTIN CODING SYSTEM FOR TEACHER

McLeish-Martin Categories	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Mand	118.00	92.00	1.00	0.97	0.97
Tact	97.00	113.00	1.00	0.37	0.37
Extended Tact	105.50	104.50	1.00	0.00	0.00
Echoic	109.00	101.00	1.00	0.09	0.09
Intraverbals	102.50	107.50	1.00	0.04	0.04
Dominant Control	86.50	123.50	1.00	1.96	2.01
Negative Affective	100.00	110.00	1.00	0.14	0.15
Informative Autoclitics	90.00	120.00	1.00	1.29	1.88
Submissive Control	95.00	115.00	1.00	0.57	1.19
Positive Affective	119.00	91.00	1.00	1.12	1.16

Note. X^2 (df = 1) = 3.84, $p < .05$.
X^2 (df = 1) = 6.64, $p < .01$.

TABLE 13

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

BALES' INTERACTION PROCESS ANALYSIS FOR STUDENT

Bales' Categories	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Seems Friendly	101.00	109.00	1.00	0.09	0.09
Dramatizes	92.50	117.50	1.00	0.89	0.90
Agrees	95.00	115.00	1.00	0.57	0.68
Gives Suggestion	118.50	91.50	1.00	1.04	1.06
Gives Opinion	118.00	92.00	1.00	0.97	0.99
Gives Information	97.00	113.00	1.00	0.37	0.37
Asks for Information	111.50	98.50	1.00	0.24	0.25
Asks for Opinion	110.00	100.00	1.00	0.14	1.00
Asks for Suggestion	100.00	110.00	1.00	0.14	1.00
Disagrees	99.50	110.50	1.00	0.17	0.45
Shows Tension	100.50	109.50	1.00	0.12	0.12
Seems Negative	102.00	108.00	1.00	0.05	0.05

Note. X^2 (df = 1) = 3.84, $p < .05$.
X^2 (df = 1) = 6.64, $p < .01$.

TABLE 14

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

MCLEISH-MARTIN CODING SYSTEM FOR STUDENT

McLeish-Martin Categories	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Mand	111.00	99.00	1.00	0.21	0.21
Tact	105.00	105.00	1.00	-0.00	-0.00
Extended Tact	108.00	102.00	1.00	0.05	0.05
Echoic	111.00	99.00	1.00	0.21	0.21
Intraverbals	98.00	112.00	1.00	0.28	0.31
Dominant Control	102.00	108.00	1.00	0.05	0.05
Negative Affective	112.00	98.00	1.00	0.28	0.29
Informative Autoclitics	000.00	000.00	1.00	0.00	0.00
Submissive Control	107.50	102.50	1.00	0.04	0.04
Positive Affective	96.50	113.50	1.00	0.41	0.51

Note. X^2 (df = 1) = 3.84, $p < .05$.
X^2 (df = 1) = 6.64, $p < .01$.

The Relationship Between the Critical Cognitive, Affective, and Social Variables and the Adjustment of Immigrant Children to Learning

Since the immigrant subjects did not differ significantly from the Canadian subjects on all of the critical variables under investigation, the relationships between the cognitive, social, and affective variables and the variable of adjustment to learning among the immigrant subjects were not explored.

Parents' Attitudes to their Mother Culture and to School Learning in the Second Culture

The author was interested in exploring the attitudes of the parents of the immigrant children toward their mother cultures and toward their children's school learning in the second culture. As a result, the parents of the immigrant subjects were contacted by phone and were asked to answer a number of questions that explored these attitudes. The information highlighted below was taken from the answers of six immigrant parents. (For a detailed presentation of frequency and variety of responses, see Appendix D.)

Attitude to their Mother Culture

All parents who were interviewed had been born and educated outside Canada and, generally, had immigrated to

Canada from their lands of birth within the last 5 to 10 years. In light of this, several of the immigrant children had been born outside Canada; however, all children had received their four grades of schooling within Canada and some had spent a number of their pre-school years in the Canadian culture. In accordance with the definition of immigrant child, all of the immigrant subjects spoke a language other than English a majority of the time in the home. The parents encouraged their children to converse in the mother language at home and occasionally outside the home; however, none of the parents provided formal lessons in the mother tongue. All teaching of the mother language was provided within the home.

Although these parents seemed to promote the mother language within the home, they did not appear to emphasize the mother language to the same extent outside the home. Three of the six parents encouraged their children to converse in the mother tongue outside the home. In addition, these parents did not appear to promote other cultural activities such as music festivals, dance outside the home. Only one parent took her children to other cultural activities outside the home, 4 or 5 times a year. Thus, for this group of immigrant children, the mother culture as defined

by the mother language and cultural activities such as music, dance, appeared to be promoted mainly within the home.

School Learning in a Second Culture

Although all the parents who answered the parent attitude questionnaire had at least two school aged children, the answers that were provided on the attitude to school learning in the second culture were centered around their children in grade 4.

All the parents seemed to be generally pleased with their children's schools. Most expressed satisfaction with the curriculum. Five of the six parents gave no as the answer to the following two questions--Is there anything taught in school which you think should not be taught? and Is there anything not taught in school which you think should be taught?

Parents seemed to be generally satisfied with other aspects of school life. In answer to the question about what they liked most about their children's schools, parents mentioned the friendly atmosphere around the schools, the good teaching, and the extracurricular activities. When asked what they disliked most about their children's schools, four of the six parents stated that they did not know.

All parents wanted their children to complete high

school and to go on to higher education, preferably the university. Most parents, however, were uncertain as to whether or not their children would obtain these goals. The researcher suggests that this uncertainty did not stem from a lack of interest but from the youth of the children.

In all families, at least one of the parents assisted his/her child with homework. Parents spent for the most part, one hour a week helping with homework.

Most of the parents had visited their children's schools. These visits were made, for the most part, at the request of the teacher or school administration. The frequency of the visits ranged from one to three times a year.

In light of the parent answers on curriculum, school life, higher education, homework, and school visits, it would appear as if these parents both passively and actively accepted school learning in Edmonton (the second culture).

Teacher's Attitude to His/Her Immigrant Students

The author was interested in exploring the following teacher attitudes:

1. The teacher's attitude toward his/her immigrant students as learners.

2. The teacher's attitude toward his/her immigrant students as learners from different cultures.

3. The teacher's attitude to an educational policy of multiculturalism.

4. The routines of teachers, peers, and school administration that could suggest active and/or passive acceptance or rejection of the immigrant children.

As a result, a questionnaire that examined these interests was given to each of the three regular classroom teachers who taught the immigrant subjects. The information highlighted below was taken from the answers of the three teachers. (For a detailed presentation of the frequency and variety of responses see Appendix D.)

The Immigrant Student as a Learner

Each of the three teachers appeared to be aware of the learning difficulties of their immigrant students and was able to indicate the areas of learning difficulty and the degree of this difficulty. In this study, the least amount of difficulty was experienced by the immigrant students in the upper socioeconomic school. In question 5, the teacher in the upper socioeconomic school circled "little difficulty" for 18 of the 21 investigated areas and "some difficulty" for the remaining 3 areas. This was compared to the answers from the teachers in the other two schools. The teacher of the middle socioeconomic school circled "little difficulty"

for 2 areas, "some difficulty" in 12 areas and "much difficulty" in 7 areas. The teacher in the lower socioeconomic level school indicated "little difficulty" in 5 areas, "some difficulty" in 12 areas and "much difficulty" in 4 areas. The areas which all teachers agreed presented little difficulty for immigrant students were handwriting and participation in classroom activities such as art, plays, music groups, and field trips. The area in which all teachers agreed that immigrant students experienced some difficulties was English pronunciation.

The Immigrant Student as a Learner from a Different Culture

All of the three teachers appeared to be aware of the unique learning problems of their immigrant students. When the teachers were asked, "What do you consider to be the major problem facing your new Canadian students?" one teacher stated that the major problem was selecting the right word in English to express ideas. The second teacher indicated that the major concern was the comprehension or understanding of classroom material. The remaining teacher felt that the feelings of acceptance and having friends was the central problem.

The teachers, for the most part, suggested that the

problems and difficulties experienced by the immigrant students were generally common to all ethnic groups. Although one teacher did indicate that the Chinese immigrant students in her classroom had more difficulties with English suffixes in oral and written work than any other immigrant group, the remaining two teachers stated that there was no immigrant group in their classroom that had more difficulties than any other immigrant group.

The teachers, for the most part, appeared to be aware of the unique problem that they experienced as teachers of immigrant students. Although one teacher indicated that there were no special problems facing her as a teacher of immigrant students, the remaining two teachers mentioned the language barrier and the constant doubt as to whether or not the immigrant students really understood what was being taught.

The three teachers also appeared to be aware of the problems resulting from the unique attitudes or customs of the parents of immigrant students. On the question "Do the attitudes or customs of parents of new Canadian children present any problems...?" the teachers answered that the parents' attitudes to discipline and the eating habits occasionally presented problems for the immigrant students

in school.

In light of answers presented above, it would appear that these three teachers had some understanding of the unique learning and teaching problems of the immigrant students in their classrooms.

An Educational Policy of Multiculturalism

The teachers in this study seemed to view an educational policy of multiculturalism in a positive manner. All agreed that one of the aims of a school should be to prepare all students for life in a multicultural society.

Classroom Routines

Immigrant students appeared to be actively and passively accepted by their Canadian peers. All three teachers reported that their immigrant students were well accepted by the other students in their classrooms. In addition, the results on student-peer relationship tested under hypothesis 9 indicated that the immigrant subjects were mentioned as frequently as the Canadian subjects on the sociometric scale and that the other students in the classrooms interacted as frequently with the immigrant subjects as they did with the Canadian subjects.

The immigrant students in this study appeared to be actively accepted by the school administration. These

students were integrated into the regular school routine. In two of the schools, the immigrant students were in the regular classrooms all day. In the remaining school the immigrant students along with a number of their peers were removed daily from their regular classroom to attend language arts and French classes.

The immigrant students appeared to be actively accepted by their teachers. As was indicated earlier in the results on student-teacher relationship and student-teacher interaction, teachers interacted as frequently with their immigrant students as they did with their Canadian students, directed as many interactions toward their immigrant students as toward their Canadian students, and did not appear to vary the quality of their behaviors between the two groups. As was suggested in the answers of the teacher questionnaire, all of the teachers encouraged contact between the home and school. The home-school contact, however, was limited.

In summary, the immigrant students appeared to be actively and passively accepted by the school administration, their teachers, and their peers. The school suggested their active acceptance by the practice of integrating these students into the regular school routine. The peer group indicated their passive acceptance by the responses on the

sociometric scale and their active acceptance through their classroom interaction. As for the teachers, they appeared to be aware of the learning problems of their immigrant students as learners and as learners from different cultures and supported an educational policy of multiculturalism. Together, these results suggested passive acceptance by the teachers. In addition, the teachers made little distinction between the immigrant students and the Canadian students as to the frequency and the quality of the interaction and encouraged home-school contact. These results suggested active acceptance. In total, the results suggested that the immigrant students were accepted as members of the classroom rather than as members of an unique ethnic group.

CHAPTER VI

DISCUSSION AND IMPLICATIONS

In this chapter, the major findings of the study are discussed. Following this, the study is compared with the relevant literature and the implications for education and research are considered. Next, the trends from ad hoc investigations are examined and suggestions for observational methodology are presented. In conclusion, the highlights of the results and discussion are summarized.

The Major Findings of the Study

In Chapter III it was hypothesized that significant differences between Canadian students and immigrant students would be found on the cognitive, affective, social, and adjustment variables highlighted in this study and, if differences were found, they would relate significantly to the adjustment of the immigrant child. The results of the study did not support the hypotheses. The immigrant subjects did not differ significantly from the Canadian subjects on any of the cognitive, affective, social, or adjustment variables.

In order to explain the findings, it seemed necessary to relook at the data from the home and the school. The immigrant students in this study came from homes that taught and promoted a non-English speaking culture within the home.

These parents, also, both actively and passively seemed to create a positive home environment for school learning. Within the school, the immigrant students seemed to be both actively and passively accepted by the school administration, their teachers, and their peers. Little distinction was made between the immigrant students and the Canadian students. The immigrant students seemed to be accepted as members of the classrooms rather than members of unique cultural groups.

According to a number of researchers (Gardner, 1968; Gardner & Lambert, 1972; Hernandez, 1973; Jaramillo, 1973; Lambert, 1967; Nida, 1971; Ramirez III & Castaneda, 1974), learning a second language was facilitated if the student had a positive attitude toward second language learning. Since learning a second language implied learning many of the attitudes and beliefs of the second culture (Hernandez, 1973), the acquisition of a second language was enhanced if the learner held a positive regard for bilingualism and biculturalism.

Researchers (Bouton, 1975; Gardner, 1968; Hernandez, 1973; Justin, 1970; Levine, 1969; Lindsfor, 1980) have suggested that the home and the school could have played a major role in ensuring a positive attitude toward bilingualism and biculturalism among second language learners.

In order to fulfill the role, the home and the school had to create environments in which the language and culture of the mother culture and the second culture were accepted and in which the two cultures appeared to work in harmony with each other. These environments, in turn, would have facilitated second language learning.

In the present study, the homes and schools appeared to fulfill the role of ensuring a positive attitude toward bilingualism and biculturalism. In the home, the mother culture was promoted; however, the second culture was both actively and passively accepted. In the schools, the second culture was promoted; however, the immigrant students seemed to be actively and passively accepted by the school administration, teachers, and peers. In the home and school both cultures appeared to be accepted and appeared to work in harmony with each other. Such environments should have ensured a positive attitude toward bilingualism and biculturalism among immigrant children and, in turn, facilitated the learning of English. In this study, this was found to be the case. The immigrant subjects did not differ significantly from the Canadian subjects on any of the measures of English proficiency.

Although the researchers on second language learning

have not suggested that home and school environments of cultural acceptance and harmony could have facilitated other aspects of second cultural learning, results of the present study implied that they do. The immigrant subjects in this study did not differ significantly from the Canadian subjects on any of the other affective, social, and adjustment variables. As a result, it was suggested that a home and school environment in which the language and culture of the mother culture and second culture were accepted, and in which the two cultures appeared to work in harmony with one another, facilitated many aspects of second cultural learning. (See Figure 4.)

Although the study findings appeared to be supported by the literature on second language learning, the study results differed from much of the literature on the ethnic-minority child. One would then have posed the question: Why? The answer to this question would probably have come from one of two sources.

1. Differences in research design, or
2. Differences in research population.

<u>Differences in Research Design</u>

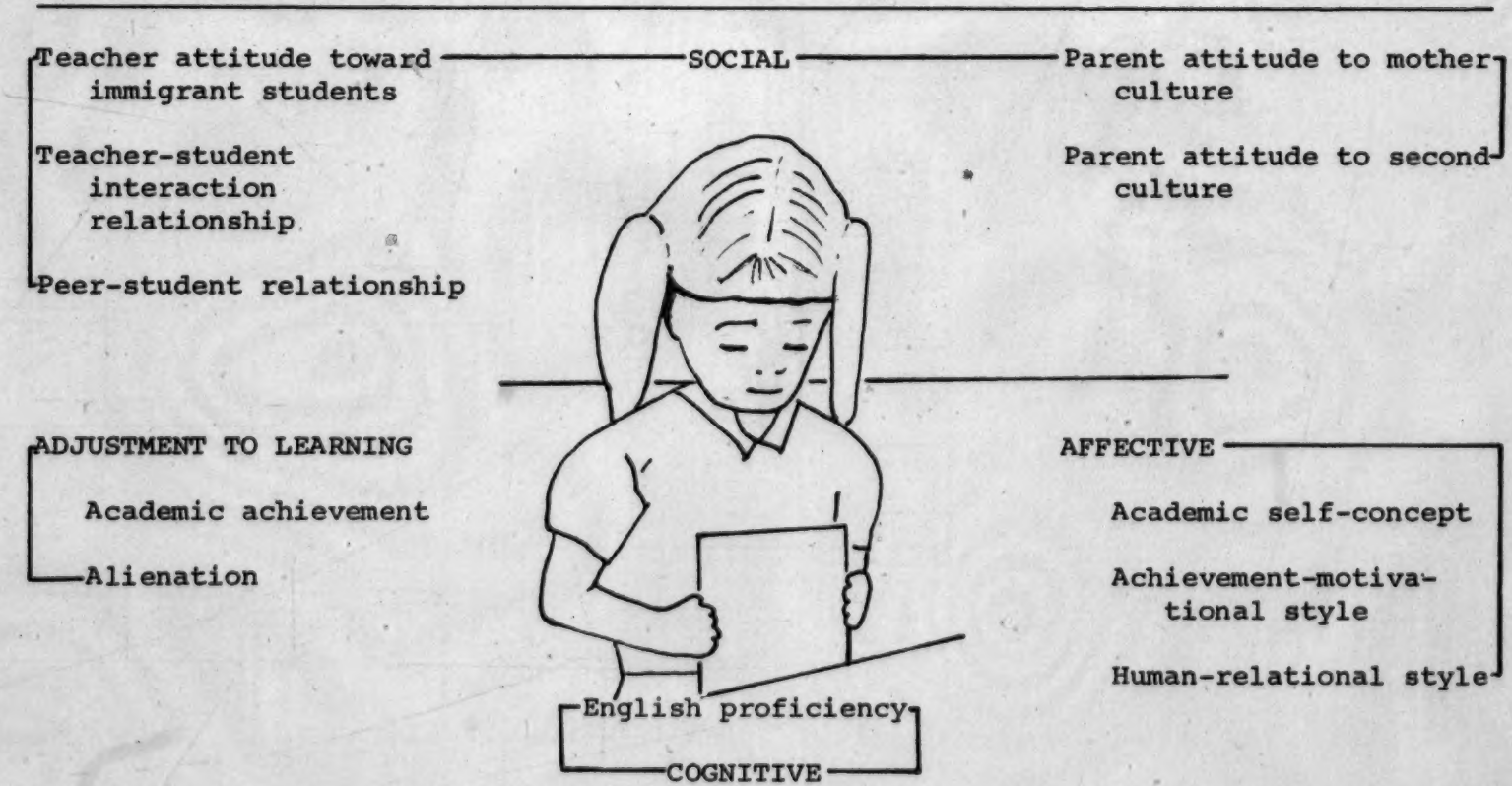
The differences in research design centered around the differences in sample size, definition of terms, and

FIGURE 4

SOCIAL VARIABLES

THE INFLUENCE ON THE COGNITIVE, AFFECTIVE, AND

ADJUSTMENT VARIABLES OF THE IMMIGRANT STUDENT



instrumentation.

In the present study, the sample was comprised of a total of 22 children (11 immigrant children and 11 Canadian children). Much of the comparative literature reported total sample sizes of 40 or more children (group sizes of 20 or more children). A few studies, however, had total sample sizes of 2 to 24 children (group sizes of 2 to 13). These latter studies investigated different aspects of the field; from language development among ethnic-minority students (Geffner & Hochberg, 1975; Hall & Turner, 1974) to teacher-student interaction (Byer & Byer, 1972, Rist, 1970) and second language learning (Burling, 1978; Leopold, 1978; Ravem, 1974a; 1974b; 1978). These smaller studies have supported some of the results in their field. For example, Byers and Byers (1972) observed a group of four girls (two black and two white) interaction with the teacher. The researchers reported that one of the white children and one of the black children were considerably more active and interested in initiating interaction with the teacher than the other children. In the first 10 minutes of observations, the more active black child glanced at the teacher 35 times and caught the teacher's attentions 4 of the times. The more active white girl looked at the teacher 14 times and

caught the teacher's attention 8 of the times. Initially, the results suggested that the teacher did not interact as frequently with the ethnic-minority student as with the ethnic-majority student, a suggestion that was consistent with the literature (Brophy & Good, 1974; Hillman & Davenport, 1978; Jackson & Cosca, 1974). These researchers, however, were able to provide additional information on the teacher-student interaction phenomena. Some of the differences which might have appeared to be representative of teacher discrimination could have been the result of differences in the student's familiarity with the culturally-determined communication patterns of the teacher. The white child had more successful interactions with the teacher because she was more familiar with the teacher's communication patterns.

In the present study, the subjects were immigrant children who had been selected according to their mother language and according to the length of time that they and their families had spent in the second culture. In much of the comparative literature, the subjects were called ethnic-minority children and were defined by their mother language and/or culture. For example, the comparative literature looked at Black American students, Spanish American students,

Mexican-American students, and Anglo-American students to name a few. There was no indication of the length of time that the ethnic-minority subjects had spent in the second culture. Since the amount of exposure to a second culture can facilitate second language learning (Hannerz, 1973; Schumann, 1978a; 1978b) and probably other aspects of second cultural learning, a definition of immigrant child and even ethnic-minority child should include an indicator of the length of time spent in the second culture.

The present study used a number of instruments to measure the cognitive, affective, social, and adjustment variables. These instruments were frequently different from the instruments used in much of the comparative literature. However, it was felt that the instruments that were selected measured aspects of the same domain as those used in the comparative literature. In addition, this study included observational measures that supported written measures. For example, peer relationship was measured by the scores on a sociometric scale and by the frequency of interaction between the target subjects and their peers. The results from both measures supported one another.

Differences in Research Population

It was certainly possible that the differences between

the study findings and much of the comparative literature could have been explained by differences in research design. After reviewing these differences, however, it seemed more likely that the differences would have stemmed from differences in research populations.

In the present study, cultural harmony appeared to exist in the homes and the schools of the immigrant subjects. One might have argued that, as a result, no significant differences were found between the immigrant subjects and the Canadian subjects. In the comparative literature, it was possible, although not necessarily stated, that cultural conflict was a characteristic of the home and/or school environments. Cultural conflict has been reported to impede assimilation, achievement, and a positive self-concept among ethnic-minority children (Carter, 1968; Carter & Segura, 1979; Justin, 1970; Levine, 1969; Ramirez III & Castaneda, 1974). Home and school environments in which the mother culture and the second culture were in conflict could explain some of the significant differences found in the comparative literature.

The immigrant subjects in the present study were in a minority in the classrooms. The percentages of immigrant students to Canadian students ranged from 12% to 28%. In

addition, a wide variety of different ethnic groups were represented in the immigrant sample. In the comparative literature, it was possible, although not always indicated, that the ethnic-minority children were in a majority in the classrooms. According to Coleman, et. al., (1966) and Carter and Segura (1979), a substantial number of ethnic-minority students in elementary and secondary schools in the United States were in schools in which they were the majority group. In addition, in much of the comparative literature, the ethnic-minority sample was comprised of one ethnic-group (Black Americans or Mexican Americans).

The literature on the proportion of ethnic-minority to ethnic-majority students in schools has been generally inconclusive (Carter & Segura, 1979; Coleman, et. al., 1966; Hodgkins & Stakenas, 1969; Rosenberg & Simmons, 1971; St. John, 1975; Stephan & Kennedy, 1975; Stephan & Rosenfeld, 1978). However, the research on this variable has centered around ethnic-minority and ethnic-majority children in segregated and desegregated schools. Such research could have been limited by extraneous variables such as poverty, prejudice, inappropriate curriculum, and inadequate school facilities (St. John, 1975).

Implications for Education and Research

In this study, grade 4, immigrant students had adjusted to learning in a second culture. Their adjustment, however, appeared to be dependent on three factors--the time spent in the second culture, the proportion of ethnic-minority students to ethnic-majority students, and cultural harmony within the school and home.

Time Spent in the Second Culture

The immigrant children in this study had spent at least five years in the Canadian culture and had received all of their schooling in Canada. The implication of this study, therefore, was that grade 4, immigrant students could have adjusted to learning in a second culture if they had spent at least five years in the second culture and had received all of their schooling there. The literature has suggested that the amount of exposure to a second culture could have facilitated second language learning (Hannerz, 1973; Schumann, 1978a; 1978b) but it has not indicated how much exposure was necessary. Further research would be necessary to explore the adjustment of grade 4, immigrant students who had spent less than five years in the second culture and/or who had not received all of their schooling in the second culture.

The Proportion of Ethnic-Minority Students to Ethnic-Majority Students

The immigrant sample in this study formed a minority group within the classroom. The percentage of immigrant students ranged from 12% to 28%. In addition, a wide variety of different ethnic groups were represented in the immigrant sample. These results, therefore, impled that the adjustment of grade 4, immigrant students could have been dependent on the percentage of ethnic-minority to ethnic-majority students in the classroom. This percentage could have approached 28% and the immigrant students would still have adjusted to learning in the second culture. In addition, the study results implied that the adjustment of grade 4, immigrant students could have been dependent on an immigrant student population in which a number of different minority ethnic groups were present.

The literature on the effects of ethnic-minority/ethnic-majority, school proportion on ethnic-minority behavior has been inconclusive (Carter & Segura, 1979; Coleman, et. al., 1966; St. John, 1975; Stephan & Kennedy, 1975; Stephan & Rosenfeld, 1978). Much of this research, however, has centered around ethnic-minority students and ethnic-majority students in segregated and desegregated schools and, as a

result, could have been limited by extraneous variables (St. John, 1975).

Lindsfor (1980) has suggested that second language learning could have been facilitated if teachers provided second language learners opportunities to interact with their second language peers. Such opportunities allowed the second language learner time to practice their second language skills. Lambert (1967) has also suggested that opportunities to practice the second language facilitated second language learning. He indicated that in many immigrant homes the mother tongue was used and, as a result, the immigrant child was not provided with sufficient opportunities to practice the second language. If this was indeed the case, then second language learners would be dependent on his/her teachers and peers to provide the opportunities to practice. As a result, the proportion of ethnic-minority students to ethnic-majority students could have been a critical factor to the adjustment of immigrant students. Further research would be necessary to investigate (a) schools in which the percentage of ethnic-minority students to ethnic-majority students was greater than 28%, and (b) schools in which the percentage of ethnic-minority students to ethnic-majority students was less than 28% and in which

the ethnic-minority population included only one or two unique ethnic groups.

Cultural Harmony Within the School and Home

The immigrant students in this study came from home and school environments in which cultural harmony appeared to prevail. In the homes, the mother culture was promoted and, at the same time, the second culture was both actively and passively accepted. In the schools, the second culture was promoted and, at the same time, the immigrant students seemed to be actively and passively accepted by the school administration, teachers, and peers. The implication of these results was that the adjustment of grade 4, immigrant students could have been dependent on the presence of cultural harmony within the schools and homes.

The importance of cultural harmony within the homes and schools to second language learning has been well documented (Bouton, 1975; Gardner, 1968; Hernandez, 1973; Justin, 1970; Levine, 1969; Lindsfor, 1980). In addition, the literature (Gardner, 1968) has indicated that the family must have fulfilled two roles--an active role and a passive role. In the active role, the parents must have actively and consciously encouraged their children to learn the

second language by making sure that the children did their homework, by helping the children do their homework when help was needed, by encouraging their children to do well, and by reinforcing the children's second language successes. In the passive role, the parents should have verbally expressed a positive attitude toward second language learning and toward the second culture. The present study supported this position. This study also suggested that the school must have fulfilled the same two roles. In the active role, the school administration, teachers, and peers have minimized distinctions between the immigrant students and the ethnic-majority students by interacting equally frequently with the two groups, by interacting with both groups in a similar manner, and by including the members of both groups in the same routines. In the passive role, the peer group has regarded the immigrant students as friends and has given them equal status to ethnic-majority students. The teachers have expressed an awareness of the unique learning needs of their immigrant students both as learners in a second culture and as learners from different cultures, and have held a positive view of an education policy of multiculturalism. The need for teachers and peers to fulfill these two roles has been supported in the literature on teacher expectation

(Brophy & Good, 1974; Cooper, 1979; Taylor, 1979).

Further research, however, would be necessary to determine if cultural harmony must exist in both the home and the school and to explore the active and passive roles of home and school. Investigations would be needed to examine (a) schools in communities where the home placed more emphasis on the mother culture both in terms of the language and other cultural activities, (b) schools in communities where the home and the community placed considerable emphasis on the mother culture both in terms of the language and other cultural activities, (c) schools in which programs of Canadianization were emphasized and the unique language and culture of the ethnic-minorities were ignored, and (d) schools in which the immigrants were placed in special classrooms or were withdrawn daily for special classes.

The general implication of this study was that these three factors were all necessary to ensure the adjustment of immigrant students to learning in a second culture. Further research is needed to determine if this was indeed the case or if adjustment could be ensured when only one or two of these factors were present. It is, therefore, suggested that any of the recommended investigations should include descriptions on the other two factors.

Ad Hoc Investigations

The results were reanalyzed to highlight possible trends in the data. Hypotheses 1 to 11 were retested using the Kruskal-Wallis one-way analysis of variance with the probability level set at .10. The obtained values indicated a significant difference between the two groups on the reading comprehension subtest of the Canadian Test of Basic Skills (See Table 1) and on the "agrees" category of the Bales' IPA for teachers (See Table 11).

The relationships between the two variables, reading comprehension and teacher's agrees behaviors, and the variables of adjustment of immigrant children to learning were examined next. To test the relationships, Spearman's coefficients of rank correlation were calculated. The results are reported in Tables 15 and 16. The obtained values indicated the following.

1. A significant positive relationship was found between reading comprehension and the two math subtests of the Canadian Test of Basic Skills.

2. A significant negative relationship was found between reading comprehension and the powerlessness score of the alienation scale.

3. A significant negative relationship was found

TABLE 1

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

ACADEMIC ACHIEVEMENT

Academic Achievement	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Reading	101.00	152.00	1.00	2.80	2.90 *
Vocabulary	109.00	44.00	1.00	1.32	1.33
Arithmetic calculation	112.00	141.00	1.00	0.91	0.91
Arithmetic problems	113.50	117.50	1.00	0.28	0.28

Note. X^2 (df = 1) = 3.84, $p < .05$.
X^2 (df = 1) = 6.64, $p < .01$.
X^2 (df = 1) = 2.71, $p < .10$.

* $p < .10$

TABLE 11

KRUSKAL-WALLIS ANALYSIS OF VARIANCE

BALES' INTERACTION PROCESS ANALYSIS FOR TEACHER

Bales' Categories	Sums of Ranks Immigrant	Canadian	df	H	Corrected H
Seems Friendly	109.00	101.00	1.00	0.09	0.09
Dramatizes	95.00	115.00	1.00	0.57	0.59
Agrees	128.50	81.50	1.00	3.16	3.25 *
Gives Suggestion	112.50	97.50	1.00	0.32	0.33
Gives Opinion	87.00	123.00	1.00	1.85	1.91
Gives Information	109.50	100.50	1.00	0.12	0.12
Asks for Information	109.50	104.50	1.00	0.00	0.00
Asks for Opinion	105.50	101.00	1.00	0.09	0.09
Asks for Suggestion	109.00	101.00	1.00	0.09	0.11
Disagrees	105.00	105.00	1.00	-0.00	-0.00
Shows Tension	94.50	115.50	1.00	0.63	0.66
Seems Negative	94.00	116.00	1.00	0.69	0.72

Note. X^2 (df = 1) = 3.84, $p < .05$.
X_2^2 (df = 1) = 6.64, $p < .01$.
X^2 (df = 1) = 2.71, $p < .10$.

* $p < .10$

TABLE 15

SPEARMAN'S COEFFICIENTS OF RANK CORRELATION

IMMIGRANT STUDENTS

READING COMPREHENSION AND ADJUSTMENT

Adjustment	Reading Comprehension
Academic Achievement	
Reading	1.00
Vocabulary	0.52
Arithmetic Calculations	0.65 **
Arithmetic Problems	0.67 **
Alienation	
Powerlessness	-0.79 **
Self-estrangement	0.12
Isolation	0.01
Normlessness	-0.34
Alienation (total)	-0.37

Note: RHO = .564, $p < .10$.
RHO = .648, $p < .05$.

* $p < .10$
** $p < .05$

TABLE 16

SPEARMAN'S COEFFICIENTS OF RANK CORRELATION

IMMIGRANT STUDENTS

TEACHERS' AGREES BEHAVIORS AND ADJUSTMENT

Adjustment	Agrees Behaviors
Academic Achievement	
Reading	0.32
Vocabulary	-0.01
Arithmetic Calculations	0.10
Arithmetic Problems	0.05
Alienation	
Powerlessness	-0.34
Self-estrangement	-0.45
Isolation	0.09
Normlessness	-0.84 **
Alienation (total)	-0.73 **

Note: RHO = .564, $p < .10$.
RHO = .648, $p < .05$.

* $p < .10$
** $p < .05$

between the proportion of teacher's "agrees" behavior and the normlessness score and the alienation or composite score of the alienation scale.

Reading Comprehension

When the level of significance was dropped to a probability level of .10, the immigrant children obtained a significantly lower sum rank score on reading comprehension than the Canadian children did. This trend in the data was not unexpected. For the immigrant students, English was a second language. Within the home, these children spoke a language other than English the majority of the time. Lambert (1967) and Hernandez (1973) have suggested that the opportunities to practice the second language facilitates second language learning. Lambert (1967) has indicated that many immigrant children were not provided with sufficient opportunities to practice the second language since the mother tongue was used in the home. The lack of opportunities to practice English could have accounted for the trend in the reading comprehension scores. However, English language differences between the two groups were not general. The immigrant students did not differ significantly from their Canadian peers on the vocabulary subtest of the Canadian Test of Basic Skills or on the verbal expressions

subtest of the ITPA even when the significance level was dropped. These ad hoc findings suggested that there was a tendency for immigrant students to overcome, although not necessarily eliminate, English language difficulties when they were submerged in the second culture for at least five years and in the school system for at least four years.

Reading comprehension and adjustment. The ad hoc investigations on the relationship between the scores on reading comprehension and on the adjustment of immigrant students to learning indicated that a significant positive relationship existed between the reading comprehension subtest and the two arithmetic subtests of the Canadian Test of Basic Skills, and a significant negative relationship existed between the reading comprehension subtest and the powerlessness scores of the alienation scale. The former finding has been supported in the test literature of the Canadian Test of Basic Skills; while, the latter finding has no research support.

The implication of the significant negative relationship was that with an increase in reading achievement there was a decrease in the feelings of powerlessness and vice versa. In other words, high reading achievers felt that they had more control over their own academic success than low reading

achievers. Lower reading achievers felt that their academic success was more dependent on teachers and school.

Much of academic achievement seems to be dependent on a good understanding of English (Lindsfor, 1980). Since English was a second language for all immigrant subjects and since the practice of English was generally left to the schools, it would seem logical that low reading achievers would have felt that their success in reading and other related academic areas could be dependent on the teacher and school. In contrast, high reading achievers who had probably grasped more of the fundamentals of English could have felt that they had a more personal control over their academic achievement.

On the other hand, it could also be argued that the students who felt a sense of powerlessness would be the ones that would not have put in the same effort and therefore would have lower academic achievement. In contrast, those who felt they were in control would have put in more effort and therefore would have higher academic achievement.

Reading comprehension as a predictor of adjustment. In the ad hoc investigations the reading comprehension subtest of the Canadian Test of Basic Skills related significantly to both aspects of school adjustment--academic achievement

and alienation from school. As a result, it would seem logical to suggest that the variable, reading comprehension could function as a predictor of the adjustment of immigrant students to learning in the Canadian English speaking school system. Where high scores in reading comprehension are obtained by immigrant students, the teacher and principal could predict that the same students would obtain similar scores in arithmetic, and would express a feeling of personal control over their reading success (and perhaps other areas of academic success). In contrast, when low scores on reading comprehension are obtained by immigrant students, the teachers would predict that these same students would obtain comparable scores in arithmetic and would feel that their academic success was controlled by the teacher. Further research would be needed to support this contention.

Teacher's "Agrees" Behavior

When the level of significance was dropped to a probability level of .10, the immigrant students obtained a significantly higher sum rank score on the proportion of teacher's "agrees" behavior than their Canadian peers did. In other words, teachers tended to direct more "agrees" behaviors toward their immigrant students than toward their Canadian students.

The "agrees" category of the IPA was one of the positive social-emotional categories which included those behaviors that indicated a passive acceptance, understanding, and concurrance. In this study, it generally included those behaviors of the teacher that positively supported, approved, or endorsed a student's correct answer to a question. Those behaviors included such verbal behaviors as "yes," "good," "right," or a repeat of a given answer and seemed to function both as an indicator of the accuracy of a student's answer and as a sign of approval for the answer.

In the literature, differences in interaction styles of teachers towards students from various ethnic groups has been reported by Coates (1972), Hillman and Davenport (1978), Jackson and Cosca (1974), Katz (1973), and Rubovits and Maehr (1973). They have implied that these behavioral differences were due to differences in teacher expectations. In this study, teachers perceived their immigrant students as having difficulties in many areas surrounding English and the language arts.

In two of the classrooms, teachers reported that these students had some difficulties in 12 of the 21 investigated areas and much difficulties in 4 to 7 of the areas. One of the teachers expressed the view that the major problem

confronting her as a teacher of new Canadian students was the constant doubt that her new Canadian students really understood what was being taught in class. In light of this, it was suggested that the teachers expected their immigrant students to have more difficulties in English and related academic areas than their Canadian students and therefore, tended to vary their behaviors to compensate for the expected differences. Teachers tended to increase those behaviors that emphasized to the immigrant student the accuracy of his/her response. Since the immigrant students had overcome many of the basic problems experienced by second language learners, the variation in teacher's "agrees" behaviors between the immigrant and Canadian groups was only demonstrated when using the higher significance level.

Teacher's "agrees" behaviors and adjustment. The ad hoc investigations indicated that the proportion of "agrees" behaviors directed by the teacher toward her immigrant students correlated negatively with two scores of the alienation scale--normlessness and the composite score, alienation. This implied that those immigrant students who received more "agrees" behaviors from their teachers felt less estranged from their school and felt that important goals could be attained by socially approved means. Those immigrant

students who received less "agrees" behaviors from their teachers felt more estranged from school and felt that socially unapproved means were required in order to attain important goals.

If the teacher's "agrees" behaviors functioned as a sign of approval for a student's answer and if the immigrant students perceived these behaviors as such, then the negative relationship between the proportion of teacher's "agrees" behaviors and the normlessness and the alienation scores would have seemed logical. The immigrant students perceived the teacher's "agrees" behaviors as a sign of approval of and acceptance by the teacher and indirectly by the school. These signs of approval and acceptance influenced the students' general feelings toward how academic goals are achieved. The findings suggested that teachers' behaviors could have played an important role in assuring the successful adjustment of immigrant children to learning in a new culture. However, this role may have been more important during the earlier stages of learning and may have become less important as the immigrant children adjusted academically. Further research is needed to support this contention.

Summary

The ad hoc investigations highlighted trends in the

data that implied the importance of reading comprehension and teacher's behaviors to the adjustment of immigrant students to learning in a second culture. Research is needed to explore the role that these two variables play. Attention needs to be granted to the adjustment of immigrant students during the early stages of submergence into the second culture.

Observational Methodology

In order to assess the quality of classroom interaction between the teacher and the target subjects, the researcher videotaped the language arts period and later analyzed the videotaped data using two apriori observation systems. The assessment procedures brought to light a number of factors regarding observational methodology. These factors are outlined below.

Videotaping Procedures

Although the subjects did not appear to habituate to the presence of the observer and the videotaping equipment, a number of factors used in this study appeared to minimize distortions in classroom activities. These factors are discussed below.

1. An habituation time of 5 days was included in the videotaping procedure.

2. The videotaping equipment was concealed in a box and placed at the back of the room in a fixed location. The box remained in this location throughout the school day.

3. The observer remained beside the equipment during the videotaping session.

4. The observer entered and left the classroom only at appropriate times in classroom routines (for example, at recess or when classes began in the morning). The observer therefore, attended classroom activities for a fixed consistent period of time.

Although the study had not included the following considerations, the inclusion of such factors could have further minimized activity distortions.

1. The videotaping equipment should have been connected to an electronic timing device that switched the equipment on and off at a predetermined time. This would have meant that the observer would not have been present during classroom activities.

2. Prior to the habituation period, the subjects should have been provided with opportunities to use the videotaping equipment and to view themselves during classroom activities.

3. Four or more cameras should have been used to

collect the data. These cameras should have been concealed in boxes, placed in a predetermined location in the classroom, and left in the classroom throughout the observational period.

Rater Training Procedures

An observational analysis procedure should have included a rater training period. This period should have begun with a brainstorming session in which the researcher and the raters took part. During the brainstorming session, the researcher and the raters should have viewed sections of the data that illustrated the types of behaviors that were to be classified. Since most apriori observation systems include a number of categories that have been generally defined, the researcher and raters should have had the opportunity to discuss how the coding system was to be applied to the study videotaped data. Following the brainstorming session, a transcript that outlined the rules and classification system decided on in the brainstorming sessions should have been drawn up and made available to the raters. The researcher and raters should have reviewed the transcript and sections of the videotaped data to make certain that the transcript was complete. Once the researcher and raters were satisfied that the transcript was complete, they should have

analyzed a predetermined section of the data. This analysis would have provided the researcher with information on the effectiveness of the chosen coding system, the effectiveness and completeness of the transcript, the degree of rater understanding of the modified or study coding system, and the degree of observer agreement (interscorer reliability). If problems were encountered, another brainstorming session should have been held and another section of data should have been analyzed. These two procedures should have been repeated until the interscorer reliability was acceptable. The use of brainstorming sessions to develop the study coding system rather than the researcher deciding on the modified coding system prior to analysis appeared to encourage a better understanding of the study coding system among raters and to ensure a more complete and possibly effective transcript of coding.

Number of Raters

Raters were used to analyze the data and to check for consistency in coding. When only two raters were used, raters tended to become familiar with each other's manner of coding and to accomodate. To minimize distortions in the analysis, three or more raters should have been used. Interscorer agreement should have been checked throughout

the period of analysis at randomly determined periods. The pairing of raters should have been done without raters' knowledge.

Period of Coding Analysis

The total coding period should have been the shortest period of time possible that would have insured consistent coding without exhausting raters. In order to do this, daily coding period should have included work periods interspersed with rest periods. Work periods should not have been longer than two hours and should not have totalled more than six hours per day. Rest periods should have been at least one to two hours in length and should not have been longer than two to three days. Extended rest periods seemed to interfere with raters' understanding of the coding system.

Summary of the Study

The immigrant subjects in this study did not differ significantly from their Canadian peers on any of the cognitive, affective, social, and adjustment variables under investigation. These findings were explained by the data on the home and school. In both of these environments, the mother culture and the second culture appeared to be accepted and seemed to work in harmony with each other. The explanation was supported by the literature on second

language learning.

Since the findings were different from much of the literature on the ethnic-minority child, the differences in design and research populations between this study and the comparative literature were discussed. Following this, the implications of the study for education and research were discussed.

The results suggested that grade 4, immigrant students had adjusted to learning in a second culture; however, their adjustment appeared to be dependent on three factors--the time spent in the second culture, the proportion of ethnic-minority students to ethnic-majority students in the classroom, and cultural harmony within the school and home.

The reanalysis of the data in the ad hoc investigations suggested that the variables reading comprehension and teacher's "agrees" behaviors may have been important factors in the adjustment of immigrant students to learning in a second culture. Research was recommended that attended to the adjustment of immigrant students during the early stages of submergence into the second culture. The study also hinted at factors that appeared to minimize the distortions in observational methodology. These factors centered around videotaping procedures, rater training procedures,

number of raters, and period of coding analysis.

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APPENDIX A

PARENT LETTER

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY
FACULTY OF EDUCATION
THE UNIVERSITY OF ALBERTA

January 14, 1980

Dear Parents,

I am a doctoral student at the University of Alberta. As part of my graduate studies, I am carrying out a research project. My plan is to investigate the adjustment of New Canadian children to learning in a new culture. It would be appreciated if your child could take part in this project.

The research is to be carried out to ascertain if the academic achievement of New Canadian students varies considerably from that of their Canadian peers and if New Canadian students feel estranged from their school. In addition, this investigation hopes to identify factors that may relate to learning in a new school system. This information could be used to assist future New Canadian students to adjust more readily to his or her new school, new teacher and new peers.

If your child is able to take part in this study, he or she will be asked to complete some paper and pencil tasks. In addition, he or she will be videotaped while in their language arts class. The videotapes will be analyzed at a later date and following this will be erased.

All data collected will be kept in strict confidence. Subject's identity will remain anonymous to all except myself.

It is hoped that your child may participate in this project. If you are willing to have your child take part, would you please fill out the accompanying form and return it to your child's teacher.

If you are interested in future information please contact me at 432-5030 or 467-6216.

Thank you.

Yours truly,

Margaret Jamieson

6-102 EDUCATION NORTH, EDMONTON, ALBERTA, CANADA • T6G 2G5 • TELEPHONE (403) 432-5245

January 14, 1980

My child .....(Name).....may take part in the project outlined in the covering letter.

Signature of mother .....

Signature of father .....

Father's occupation .....

Mother's occupation .....

APPENDIX B

QUESTIONNAIRES AND SCALES

QUESTIONNAIRE FOR TEACHERS

OF NEW CANADIAN CHILDREN

Questions 1 to 4 and 6 to 16 were selected from the teacher questionnaire of Ashworth (1975). The remaining question, question 5, was included to cover the unique needs of the study.

1. How many New Canadian students do you teach?

   Girls _____ Boys _____

2. What is their age range? _____

3. What different languages are represented and how many students are there in each language group?

Student's First Language	Number of students in class who speak the language
Chinese	_____
Dutch	_____
French	_____
Finnish	_____
German	_____
Greek	_____
Italian	_____
Japanese	_____
Korean	_____
Norwegian	_____
Polish	_____
Portuguese	_____
Spanish	_____
Swedish	_____
Ukrainian	_____
Vietnamese	_____
Other (specify)	_____

4. Do you have your New Canadian students all day or are they withdrawn from regular classes for short periods of time? _____

_____

_____

5. To what degree do New Canadian students experience difficulties in the following areas? (Please circle appropriate number)

	Little 1	Some 2	Much 3
Listening to English instructions.....	1	2	3
English pronunciation.....	1	2	3
Speaking English fluently.....	1	2	3
Following spoken English instructions	1	2	3
Following written English instructions	1	2	3
Reading	1	2	3
Handwriting	1	2	3
Spelling	1	2	3
Written compositions	1	2	3
Literary appreciation	1	2	3
Knowledge of English grammar	1	2	3
Arithmetic	1	2	3
Confidence in reading ability	1	2	3
Confidence in spelling ability	1	2	3

	Little 1	Some 2	Much 3
Confidence in arithmetic ability	1	2	3
Confidence in general academic ability	1	2	3
Participating in classroom discussions	1	2	3
Answering questions during lessons	1	2	3
Participating in classroom activities ie. art, plays, music groups, field trips	1	2	3
Talking out problems with the teacher	1	2	3
Interacting with Canadian peers	1	2	3

6. What do you consider to be the major problem facing you as a teacher of New Canadian students? _____

_____

_____

7. What do you consider to be the major problem facing your New Canadian students? _____

_____

_____

8. How much contact do you have with the parents of the New Canadian students? _____

_____

If little contact, why? _____

_____

Are translators available if you require one? _____

_____

9. Do the attitudes or customs of parents of New Canadian children present any problems concerning the following? Please check or comment.

Dress _____
Food _____
Co-education _____
Discipline _____
Physical Education _____
Extra-curricular activities _____
Future education _____
Employment opportunities _____
Other (specify) _____

_____

_____

10. Does any one immigrant group seem to have more difficulties than the other groups? _____

_____

If so, which group? _____

_____

What is the nature of their difficulties? _____

_____

11. How well do the other students in your school accept the New Canadian students? _____

_____

_____

12. Do you think schools should have as one of their aims the preparation of all students for life in a multicultural society? _____

_____

_____

13. How long have you been teaching New Canadian children?

_____

_____

14. What is your total teaching experience in years?

_____

15. What languages other than English do you speak with some fluency? _____

_____

16. Have you had any special training in teaching New Canadian students? _____

If yes, please describe. _____

_____

_____

On the back of this sheet please add any further comments you would like to make on topics included in this questionnaire or on topics related to the education of New Canadian children but not included in the questionnaire.

PARENTS' QUESTIONNAIRE

Questions A1 to C1 inclusive were selected in whole or in part from the parent questionnaires of Bynner (1972) and Lynch and Pemlott (1976). The remaining three questions were included to cover the unique needs of the study.

A 1. How many school age children do you have?

2. (a) Do you have any children in Grade IV?

Yes _____ No _____

(b) Is this child a boy or a girl?

Boy _____ Girl _____

Please Note: All following questions refer only to your child who is in Grade IV.

B Please select the one that is right for you.

1. Generally speaking are you satisfied with the school that your child attends?

Very satisfied _____
Satisfied _____
Not satisfied _____

2. Does your child like school?

Usually _____
Sometimes _____
Rarely _____

3. Do you think your child should have school work to do at home?

Yes _____
No _____
Undecided _____

4. (a) Has the teacher given your child any homework?

Yes _____
No _____

(b) If yes:

i) How many hours a week on an average does your child spend on homework?

_____ hours

ii) Do you think that your child is given about the right amount of school work to do at home at present or does he/she get too much or too little?

Given right amount _____
Given too much _____
Given too little _____
Undecided _____

5. Have you ever asked the teacher to give your child some work to do at home?

Yes _____
No _____
No need _____

6. Have you ever asked the teacher to show you how you can help your child with his/her homework?

Yes _____
No _____

7. (a) Outside school does your child get any help with school work from anyone, including yourself or your husband/wife?

No _____
Yes--both husband and wife _____
Yes--wife only _____
Yes--husband only _____
Yes--brothers and sisters _____
Yes--others _____

(b) If yes:

i) In what subject areas do you provide help?

Why?

ii) How many hours a week on an average do you spend with your child helping him/her with homework?

Husband _____ hours
Wife _____ hours
Brothers and sisters _____ hours
Others _____ hours

8. On matters concerning your child would you like a visit in your home from:

(a) the principal

Yes _____
No _____
Undecided _____

(b) your child's teacher

Yes _____
No _____
Undecided _____

(c) others

Yes _____
No _____
Undecided _____

9. Is there anything taught in school which you think should not be taught?

10. Is there anything no taught in school which you think should be taught?

11. What is it that you like most about your child's school?

12. What is it that you dislike most about your child's school?

C 1. How many times have you visited your child's school? Reason for visits?

(a)	In the last 3 months	1-3	4	0
(b)	In the last year	1-3	4	0
(c)	Since your child started school	1-3	4	0

Reason for visits.

2. (a) How long have you lived in Canada?

Less than 1 year _____
1 - 3 years _____
3 years or more _____
born in Canada _____

(b) In what other countries have you lived? Time lived in other countries?

(c) What language(s) do you use at home?

% of time of usage?

(d) Do you encourage your child to speak _____

at home? _____

outside the home? _____

(e) Do you provide your child with lessons in _____?

Yes _____ No _____

(f) Does your child attend activities on _____ culture?

Yes _____ No _____

(g) How often does your child attend these activities?

Once a week _____
Once a month _____
Other _____

3. Do you wish your child to complete High School?

Yes _____ No _____

4. (a) Do you wish your child to go on to:

University _____
NAIT _____
Learn a trade _____
Others _____

(b) Do you think your child will go to _____?

Yes _____
No _____
Don't know _____

Name: Age:

Teacher:

School: Boy or Girl:

Have you always gone to school in Edmonton?

Yes _____ No _____

If no, where else have you gone to school?

In Alberta? _____

In Canada? _____

Outside Canada? _____ Where? _____

Where did your mother and father go to school?

In Alberta? _____

In Canada? _____

Outside Canada? _____ Where? _____

How many languages do you speak? _____

What are the languages that you speak? _____

What language do you use most of the time when you speak to:

your teacher? _____

your friends at school? _____

your mother? _____

your father? _____

your brothers and sisters? _____

your relatives? _____

MODIFIED VERSION OF

CORDOVA'S ALIENATION SCALE (1968)

1	2	3
True	Sometimes True	False

1. Teachers are fair to students.

   1 2 3

2. Most students don't realize how much their grades depend on luck.

   1 2 3

3. When I'm in class I feel that I have a home away from home.

   1 2 3

4. I never found it hard to do my work better in class.

   1 2 3

5. I like my school work better this year than last year.

   1 2 3

6. If I study hard I get good grades. If I don't study hard I don't get good grades.

   1 2 3

7. Most students enjoy doing the best that they can in school.

   1 2 3

8. Students usually work hard in order to get good grades.

   1 2 3

9. I have always felt that I will finish High School.

   1 2 3

10. Sometimes I work so hard on my school work that I

cannot think of anything else.

1 2 3

11. I don't think that school has stopped me from learning as much as I can.

1 2 3

12. I enjoy my school work most of the time.

1 2 3

13. I often tell my teacher my ideas about things we might do in class.

1 2 3

14. I often find myself enjoying my school work.

1 2 3

15. I talk over problems with my teachers after the class.

1 2 3

16. My teacher often helps me to do better in my school work.

1 2 3

17. It is very important for me to go to junior high school and high school after I finish elementary school.

1 2 3

18. My school gives us time to do the things that I like to do best.

1 2 3

19. My teachers know better than I what is good for the class.

1 2 3

20. Students should quiet down whenever a teacher comes into the room.

1 2 3

21. In school, the best kids usually are good students.

1 2 3

22. Many times test questions are not about the work that we take in class so it is useless to study.

1 2 3

23. I don't feel too much at home when I'm in class.

1 2 3

24. Sometimes it doesn't matter how hard you work in class, the teacher has decided on your grade at the beginning of the year.

1 2 3

25. I go to school so that I can get a good job when I grow up.

1 2 3

26. This year I have not been as interested in my school work as I was last year.

1 2 3

27. Sometimes I cannot understand why teachers give the grades they do.

1 2 3

28. Sometimes I think that I will not be able to finish high school.

1 2 3

29. I really would like to get good grades but I don't think I will.

1 2 3

30. I consider a lot of my school work to be just another job--I do it just to get it over with.

1 2 3

31. At times I have thought that I would be happier if I

were not going to school.

1 2 3

32. In some ways I feel that school has stopped me from learning as much as I can.

1 2 3

33. I usually only do my work because I have to.

1 2 3

34. I often do things in school that I would not do if it were up to me.

1 2 3

35. I often wish I was not going to school.

1 2 3

36. I have not been able to get the things I want in life because I am a student.

1 2 3

37. I often feel that students are treated unfairly in school.

1 2 3

38. I often think of quitting school.

1 2 3

39. It is not fair to punish students for cheating when so many of them do it.

1 2 3

40. Usually good grades cannot be gotten without being a teacher's pet.

1 2 3

41. Many students get good grades because they have had help from friends or relatives for tests.

1 2 3

42. School would not be much fun if students obeyed the

rules all of the time.

1 2 3

43. How well I do in my school work does not interest me too much.

1 2 3

44. Sometimes I would have to stay out of school to do the things I would really like to do.

1 2 3

45. Usually I do not agree with what my teachers say and I often feel like telling them.

1 2 3

46. Students who do everything their teachers tell them to do are really unhappy.

1 2 3

APPENDIX C

RULES FOR SCORING

SCORING OF THE MODIFIED VERSION OF

CORDOVA'S ALIENATION SCALE (1968)

Subscales and Item Numbers

1. Powerlessness

1 2 4 6 9 22 24 27 28 29 37

2. Normlessness

39 40 41 42 43 44 45 46

3. Isolation

13 15 16 17 18 19 20 21 31 33 34 35 38

4. Self-estrangement

3 5 7 8 10 11 12 14 23 25 26 30 32 36

Key

In items 1--21,

1--True score as 1

2--Sometimes true score as 2

3--False score as 3

In items 22--46

1--True score as 3

2--Sometimes true score as 2

3--False score as 1

SCORING OF THE SCHOOL SITUATIONS

PICTURE STORIES TECHNIQUE

Scoring for Achievement-Motivation and Human-Relational Style

To score the School Situations Picture Stories Technique (Ramirez & Castaneda, 1974) for achievement-motivational and human-relational styles, an abbrieviated version of the scoring system devised by McClelland and his colleagues (1953) was used. Under this scoring system points were given for themes that appeared in the stories. In order for a theme to receive a point, four factors that were related to the theme had to be included in the story. These four factors were as follows.

1. A reference made to a particular motive or goal such as achievement, affiliation, etc.

2. An indication that the character in the story is doing something to obtain the particular motive or goal.

3. An activity leads to the achievement of the particular motive or goal.

4. The plot of the story revolves around the particular motive or goal.

Only one theme point could be assigned to a story. If there were more than one possible theme in a story, the point was given to the first completed theme. In this

study, the following themes appeared in the stories.

1. Achievement for the family. This theme was defined as a desire to achieve a goal in order to benefit the family or in order to make the family proud of the story character. The following are examples of stories illustrating such a theme.

> Once she got her 100% she went happy along to her mother. Her mother was excited. She bought her a new dress. It was pink and white.
>
> She finished working in the house and she was studying. He (her father) was very happy cause she didn't study before cause she was studying now and working hard and he was happy and she said, "I will not play every day with dolls. I will study. I will get times for study." He was happy, happy and she smart.

2. Cooperation achievement. This theme was defined as a desire to work with others as a team in order to obtain a desired goal. The following is a story that illustrates a cooperation achievement theme.

> They listened to records. She got the record and she (her friend) got the record player. She ended up playing on hers (her friend's record player) and she had no record player but the records were on so they thought that they'd put together and they listened to her records and they put the records on her (her friend) record player and then they could hear the music and then any time they wanted they just go to each other's house and play the music and ...

3. Need for personal achievement. This theme was defined as a desire to achieve a goal through personal

effort. The following is an example of a story that illustrates such a theme.

> She was reading a book because she is studying for a test. First her teacher said that they are going to have a test so she went to study and then she got her test. She just got a few wrong cause she didn't know most of the words. She studied them again and the teacher said that she could do another test. She got better on the test.

4. Need to be accepted by someone in authority. This theme was defined as a desire to achieve a goal in order to make the teacher, principal (someone in authority other than the family) proud of the story character. The following is a story that illustrates such a theme.

> ...they were studying on social. They had a book report to do and Kim didn't know what book report meant. She never asked the teacher and said, "Well I like to write anyway. I think that you have to make a book." So when it came to social she made this whole big book and everyone else just made about three pages...then at social time everybody was reading their report and then she came up to the front. Her teacher said, "No Kim you have to bring your book report not the book that you got it from." "But this is my book report. I thought you said that you had to write a book report. I thought you meant that you had to write a book and so." "Oh no you just have to write about two or three pages." But she wrote a whole book. The teacher was really happy with her. The teacher read her book and it was really good and so at the end of the year she got a real good report card again...

5. Need for personal enjoyment. This theme was defined as a desire to achieve a goal for personal pleasure.

The following are stories that illustrate such a theme.

> It's free reading time and the boy is reading a book. The book is about animals and he is reading about birds. He goes bird watching and finds all the birds that he saw in the book.

> She might be reading. She might have just taken the book out of the library. She finishes the book. The book will have a happy ending and she will too. She will feel good that the book ended like that.

6. Need affiliation. This theme was defined as a desire to interact with others and to belong to a social group. The following is a story that illustrates a theme of need affiliation.

> One day school was over and then they had fun playing together and then they went to see her puppy and then she (her friend) said that she doesn't want to be her friend any more cause her other friend was jealous cause she had another friend. She was sad cause she wasn't her friend and she went home and she made friends with other kids. Then she brought her (her friend) over to her friends and she (her friend) didn't want to see the friend that was jealous. They were happy.

7. Need to nuture. This theme was defined as a sensitivity to other's feelings and a willingness to help others. The following story illustrates a theme of need to nuture.

> This guy said that he wanted to learn about the world and he (his friend) said, "I'll show you." He (his friend) was telling him where these places were. He (his friend) said, "There's China." He said, "Where is India." He said, "There it is. Do you want to learn about any more places?" He said, "OK. How

about Korea?" And he (his friend) said, "OK. I'll just turn it around here. OK. Here's Korea. It's like China. It's by the ocean." He said, "Oh." And he (his friend) said, "Do you want to learn about any others?" And he said, "No."

8. Need succorrance. This theme was defined as a willingness to rely on others particularly adults for help and guidance. The following story illustrates a theme of need succorrance.

> The little girl is asking the teacher a question that she doesn't know how to do. The teacher told her how to do it and then she went to do it. The teacher went to her seat and then she got a star. She got a star because the teacher helped her.

9. Need to conform to authority or routine. This theme was defined as a willingness to adhere to the social or institutional regulations or procedures. The following stories are examples that illustrate a need to conform to authority or routine.

> The boy is reading his father a story and his father is listening. After he finishes the story he went to read his mother one. He put the book away and went to watch TV.
>
> His father was mad with the little boy and then he (his father) sent him to bed. He went to sleep. In the morning he had a little bit of homework to do cause it was his weekend off. His father had to work so his father said, "You better do that homework else if mother tells me that you weren't doing your homework you'll get a licking." The little boy was done in two minutes...

Scoring for Conflict

The stories of the School Situations Picture Stories Technique were also scored for conflict. Each of the stories could receive one point for a theme of conflict. Conflict was defined as a state of anxiety or tension which resulted when two or more forces were in opposition. The following is an example of a story that illustrates the theme of conflict.

> He could have thrown a rock at the window and it broke. He was suspended from school. If the boy wanted to get back to school he had to bring his parents in and they would talk about it and then the school would let him back in. So the principal let him back in and this time when they were playing "hide and seek" everyone went to hide. He was at the place, right and someone who was indoors threw a rock out and he picked it up. The principal came out and saw him with the rock. The principal thought that he was about to throw it and he (the principal) called his parents again. The principal said that he saw him, that he was about to throw it again. After awhile his friend came over and said that the little boy didn't throw the rock. His parents said, "How do you know?" His friend said, "Because I did." They had to pay if they were to get him back in school. The little boy's friend didn't have that much money so they (the little boy's parents) told him (the friend) that they would pay.

Scoring for Culture

The stories of the School Situations Picture Stories Technique were scored for a theme of culture. Each of the seven stories could receive one point for a theme of culture.

Culture was defined as an awareness of different cultural groups or as an expressed pride in a cultural group. The following is an example of a story that illustrates the theme of culture.

> The next day she went to school and they were doing this project about her country. The first little girl said, "Where do you live?" The second little girl showed her where she lived. She (the second girl) showed her that she lived in Africa. So the first little girl asked her, "What do you do there?" So Tammy (the second little girl) said, "Just rest up there and then do just a little bit of work." Then the first little girl goes, "What do you do at school?" Tammy said, "We do arithmetic, spelling, and art. It's really fun. Where do you live?" Mary (the first little girl) said, "In Bolivia." And Tammy asked, "What do you do there?" And Mary said, "You just rest and do some work." "What language do you speak?" "Bolivian." "What do you do at school?" "We do the same things that you do." Then Tammy said, "What do you dress?" "Hats and dress and cloth over your head. Then you put the hat up and colorful gowns and dresses." Then Tammy said, "What's your name?" And Mary said, "Mary." And then they went in. Mary went with Tammy into the house and Mary played with Tammy's make-up kit and Barbie doll.

GENERAL RULES OF SCORING

CLASSROOM INTERACTION

1. Scoring

The immigrant subject and the matched Canadian subject are to be regarded as a pair; therefore, the interaction between the teacher and one of the subjects of a pair is to be scored when and only when both subjects of a pair are involved in the same activity at the same time.

2. Scorable Interaction

Only the unique interactions between the target subjects and their teacher are to be coded. An interaction in which all target subjects take part is not considered to be an unique interaction.

3. The Starting Point of a Scorable Interaction

A scorable interaction starts when a target subject or subjects puts up his/her/their hand(s), when the teacher speaks directly to a target subject or when a target subject speaks directly to the teacher.

4. The End Point of a Scorable Interaction

A scorable interaction ends when a target subject or subjects bring his/her/their hand(s) half way or all the way down or when the conversation between the teacher and the target subject or subjects end.

5. Initiated Act

A scorable interaction is teacher initiated when a teacher directs his or her verbal or nonverbal behaviors towards a target subject and the target subject has not requested the interaction by putting up her or his hand prior to the interaction. All other scorable interactions are considered to be student initiated.

6. Interaction with Peers

An interaction with peers occur when a target subject and a fellow student speaks to one another, makes eye contact with one another, or touches one another. Such interactions are counted but not scored.

7. Reading

If a target subject reads aloud to the class, score such behavior once. Under the Bales' Interaction Process Analysis (IPA), score reading behavior in category 6. Under the McLeish-Martin Coding System (M-M), score reading behavior in category 2. If an interaction occurs between the teacher and the target subject sometime during the oral reading, score the interaction under the appropriate categories. If an interaction occurs between the teacher and a non-target student and the target subject pauses in his or her reading, score the target subject's behavior in

category 1 in the IPA and in category 9 in the M-M. Once the target subject resumes reading after either type of action, score the target subject's reading behavior once again.

SCORING SYSTEM FOR

THE BALES' INTERACTION

PROCESS ANALYSIS

The raters were provided with a transcript of definitions of the categories as outlined by Bales in the book entitled Interaction Process Analysis: A Method for the Study of Small Groups (1976).

In addition the raters were supplied with a list of rules on the scoring of the Bales' Interaction Process Analysis.

1. Bales' General Rule on Priorities

   A. Do not score in 5 if you can reasonably score anywhere else.

   B. Most important thing to record is tension (i.e. Forward/backward categories)--2 and 11.

   C. Next most important--affective categories--1 and 12.

   D. Third dimension--Ascendent/Submissive--4 and 9. This comes third because you already get a measure of people's ascendence or submission through total number of acts initiated by them.

2. Score hand up in 4 if hand up seems to indicate a suggestion to answer a question or a suggestion to ask the teacher a question.

3. Score hand down in 4 if hand down seems to indicate a suggestion of not wanting to answer a question.

4. Score hand down in 1 if the student brings his/her hand down when another student answers a question.

5. Score hand half way down in 3 if the student answers a question. This would suggest that the first student recognizes that the second student is getting ready to speak.

6. Score hand up in 2 if the student shakes his/her hand vigorously as if to suggest a strong positive desire to answer a question.

SCORING SYSTEM FOR

THE MCLEISH-MARTIN CODING SYSTEM

The raters were provided with the following transcript of definitions of the categories as outlined by J. McLeish and J. Martin in the article entitled Verbal behavior: A review and experimental analysis. Journal of General Psychology, 1975, 93, 3-66.

Operant Categories	Definitions	Examples-Behaviors Included
Mand	A verbal operant in which the response is reinforced by a characteristic consequence The response is therefore under the functional control of relevant conditions of deprivation or aversive stimulation.	Vocal 1. "Can you tell me what your name is?" 2. "Forget about that." 3. "Let's stop avoiding the task." Nonvocal 4. Questioning glances. 5. Directing gestures, of command, etc. 6. Student's hand up if the nonvocal behavior suggests that the student wishes to answer the question. 7. Student's hand down if the nonvocal behavior suggests that the student does not wish to answer the question.
Tact	A verbal operant in which a response of given form is evoked (or at least strengthened) by the	Vocal 1. "His chair is vacant." 2. "The group is anxious." 3. "Here, in this room."

Operant Categories	Definitions	Examples- Behaviors Included
	actual presence of a particular object, or event, or property of an object or event.	Nonvocal 4. Any acknowledgement of an object, or ongoing physical activity, referred to by gestures. 5. Student's hand down if the student brings his/her hand down when another student has been asked to answer the question.
Extended Tact	A verbal operant in which a response is generated by physical properties of objects and events where the association between the speaker's behavior and the physical properties is not commonly reinforced by the particular verbal community.	Vocal 1. "It's a bloody morgue" (referring to the group situation). 2. "The preacher said so" (referring to the therapist). Nonvocal 3. Ritualized bowing to the group leader (the gestures are not entirely appropriate to the object actually being responded to).
Echoic	A verbal operant in which a response is under the control of verbal stimuli such that the response has formal properties precisely the same as the stimulus.	Vocal 1. Any spoken repetition. 2. Laughter which follows closely an initial burst of mirth. Nonvocal 3. Modelling of postures, gestures, etc. by some other participant.
Intraverbal	A verbal operant in which the response is thematically related but shows no point-to-point correspon-	Vocal 1. "We have certain expectations" (follows upon "The group is waiting for something to happen").

Operant Categories	Definitions	Examples- Behaviors Included
	dence to the verbal stimulus.	2. "We share a few laughs" (part of an anecdote about friends). Nonvocal 3. Stretching and yawning (behaviors during a monologue on fatigue). 4. Social routines i.e. teacher writes student's answer on the board as routine.
Dominant Control Autoclitic	A verbal operant which calls attention to the speaker or what he is saying.	Vocal 1. "Now." 2. "So." 3. "Well ah'm." Nonvocal 4. Leaning forward, or leaning back in chair (attention getting). 5. Pause for effect. 6. Student's hand up if student shakes hand in air to attract teacher's attention.
Negative Affective Autoclitic	A verbal operant which indicates a negative emotional reaction to what has been said.	Vocal 1. "No fear!" 2. "I doubt it very much!" Nonvocal 3. Cutting across the flow of communication with a disruptive gesture. 4. Looking away from the speaker.
Informative Autoclitic	A verbal operant which clarifies or alters the effect	Vocal 1. "I see where..." 2. "On the other hand..."

Operant Categories	Definitions	Examples-Behaviors Included
	of a given communication but does so without any indication of emotion.	3. "However, it could be..." 4. "I wish..." etc. Nonvocal 5. Any dramatization or gesture which clarifies other verbal behaviors, e.g., a shrug which accompanies the word "confusion."
Submissive Control Autoclitic	A verbal operant which indicates passive acceptance.	Vocal 1. A bland "yes." Nonvocal 2. Attentive listening postures. 3. Direct and continuing eye contact with speaker.
Positive Affective	A verbal operant which indicates a positive reaction to what has been said.	Vocal 1. "I agree." 2. "Definitely." Nonvocal 3. Smiling. 4. Nodding. 5. Laughing at a joke, etc.

APPENDIX D

RESULTS OF THE

PARENT QUESTIONNAIRE AND

THE TEACHER QUESTIONNAIRE

RESPONSES TO

QUESTIONNAIRE FOR TEACHERS

OF NEW CANADIAN CHILDREN

The information presented was provided by the three regular classroom teachers who taught the immigrant subjects. No attempt was made to determine the statistical significance of the results; only frequency and variety of responses were presented.

1. How many New Canadian students do you teach?

Girls 5, 6, 1
Boys 5, 1, 0

2. What is their age range?

8--9
9--10
9--10

3. What different languages are represented and how many students are there in each language group?

Chinese	1	
French	1	
German	2	(separate classes)
Italian	1	
Korean	1	
Polish	1	
Portuguese	1	
Spanish	1	
Swahili	2	
Hindi	1	
Urdu	1	
Czech	2	
Hungarian	1	

4. Do you have your New Canadian students all day or are they withdrawn from regular classes for short periods of time?

Language arts daily for 1½ hours
French daily for ½ hour
Two in high potential program weekly for 1 hour
No
Not now

5. To what degree do New Canadian students experience difficulties in the following areas? (Please circle appropriate number)

	Little 1	Some 2	Much 3
Listening to English instructions	1 (1)	2 (2)	3
English pronunciation	1	2 (3)	3
Speaking English fluently ...	1	2 (2)	3 (1)
Following spoken English instructions	1 (1)	2 (2)	3
Following written English instructions	1 (1)	2 (2)	3
Reading	1 (1)	2 (1)	3 (1)
Handwriting	1 (3)	2	3
Spelling	1 (1)	2 (1)	3 (1)
Written compositions	1 (1)	2 (1)	3 (1)
Literary appreciation	1 (1)	2	3 (2)
Knowledge of English grammar	1	2 (1)	3 (2)
Arithmetic	1 (2)	2 (1)	3

Confidence in reading ability	1 (1)	2 (1)	3 (1)
Confidence in spelling ability	1 (1)	2 (2)	3
Confidence in arithmetic ability	1 (2)	2 (1)	3
Confidence in general academic ability	1 (2)	2	3 (1)
Participating in classroom discussions	1 (1)	2 (2)	3
Answering questions during lessons	1 (1)	2 (2)	3
Participating in classroom activities i.e. art, plays, music groups, field trips ...	1 (3)	2	3
Talking out problems with the teacher	1 (1)	2 (1)	3 (1)
Interacting with Canadian peers	1 (1)	2 (2)	3

6. What do you consider to be the major problem facing you as a teacher of New Canadian students?

   None
   The constant doubt that they really understand what is going on
   The language barrier

7. What do you consider to be the major problem facing your New Canadian students?

   Finding the right English word to express an idea
   Comprehension --→ understanding --→ confidence
   The feeling of acceptance and having friends

8. How much contact do you have with the parents of the New Canadian students?

Very little
Interview at report card time for some; others none
Occasionally --- not much

If little contact, why?

Lack of confidence in speaking English
No reason for continuous contact

Are translators available if you require one?

Not needed
No
Yes

9. Do the attitudes or customs of parents of New Canadian children present any problems concerning the following?

Food 1 (teased)
Discipline 1

10. Does any one immigrant group seem to have more difficulties than the other groups?
No
Partially
No

If so, which group?

Chinese

What is the nature of their difficulties?

Suffixes--word endings in written and oral work

11. How well do the other students in your school accept the New Canadian students?

Well accepted
Well accepted
Extremely well, the school is full of New Canadian students.

12. Do you think schools should have as one of their aims the preparation of all students for life in a multi-cultural society?

    Yes
    Yes
    Definitely

13. How long have you been teaching New Canadian children?

    11, 4, 1

14. What is your total teaching experience in years?

    11, 4, 11

15. What languages other than English do you speak with some fluency?

    None
    French
    French, Polish, Russian, German, Ukrainian

16. Have you had any special training in teaching New Canadian students?

    No
    No
    No

RESPONSES TO

PARENTS' QUESTIONNAIRE

The information presented was provided by six of the parents of the immigrant subjects. No attempt was made to determine the statistical significance of the results; only frequency and variety of responses were presented.

A 1. How many school age children do you have?

Number of school age children in families	Number of families
2	4
3	1
5	1

2. a) Do you have any children in Grade IV?

Yes 6 No 0

b) Is this child a boy or a girl?

Boy 2 Girl 5

Please note: All following questions refer only to your child who is in Grade IV.

B Please select the one that is right for you.

1. Generally speaking are you satisfied with the school that your child attends?

Very satisfied 2
Satisfied 4
Not satisfied 0

2. Does your child like school?

Usually 5

Sometimes	1
Rarely	0

3. Do you think your child should have school work to do at home?

Yes	6
No	0
Undecided	0

4. a) Has the teacher given your child any homework?

Yes	6
No	0

b) If yes:

i) How many hours a week on an average does your child spend on homework?

2 hours	3
1½ hours	1
1 hour	1
Do not know	1

ii) Do you think that your child is given the right amount of school work to do at home at present or does he/she get too much or too little?

Given right amount	3
Given too much	1
Given too little	2
Undecided	0

5. Have you ever asked the teacher to give your child some work to do at home?

Yes	0
No	6
No need	0

6. Have you ever asked the teacher to show you how you can help your child with his/her homework?

Yes 1
No 5

7. a) Outside school does your child get any help with school work from anyone, including yourself or your husband/wife?

No	1
Yes--both husband and wife	3
Yes--wife only	1
Yes--husband only	1
Yes--brothers and sisters	1
Yes--others	0

b) If yes:

i) In what subject areas do you provide help?

Arithmetic	3
Spelling	1
Language	1
Writing	1
Science	1
Whatever Homework	2

ii) Why?

Doesn't understand the meaning of words
To assess child's progress and motivation
Not enough attention to these subjects in school
Having difficulty in the subject

iii) How many hours a week on an average do you spend with your child helping him/her with homework?

Husband	30; 1; ½; ¼ hours
Wife	1; 1; ½; ½ hours
Brothers and sisters	1 hours
Others	hours

8. On matters concerning your child would you like a visit in your home from:

a) the principal

Yes	1
No	2
Undecided	3

b) your child's teacher

Yes	1
No	2
Undecided	3

c) others

Yes	1
No	2
Undecided	3

9. Is there anything taught in school which you think should not be taught?

No	5
Should just teach basics	1

10. Is there anything not taught in school which you think should be taught?

No	5
Too little religion	1

11. What is it that you like most about your child's school?

Math	1
Gymnastics	1
Good teaching	2
Trips	1
Friendly atmosphere	2
Nothing	1

12. What is it that you dislike most about your child's school?

Spelling	1
Children fighting	1
No transportation to school functions	1
Nothing	4

C 1. How many times have you visited your child's school? Reason for visits?

a)	in the last 3 months	1-3 (2)	4 (0)	0 (4)
b)	in the last year	1-3 (4)	4 (1)	0 (1)
c)	since your child started school	1-3 (0)	4 (5)	0 (1)

Reason for visits

Report cards	2
School asked for interview	1
Parent-teacher meetings	1
Plan field trips	1
School concert	1

2. a) How long have you lived in Canada?

Less than 1 year	0
1 - 3 years	0
3 years or more	6
born in Canada	0

b) In what other countries have you lived? Time lived in other countries?

Austria--1 year
India--born there
Pakistan--born there
Poland--born there
South Africa--born there
Uganda--born there

c) What language(s) do you use at home? % of time of usage?

Afrikaans	1
Hindi	1
German	1
Polish	1
Swahili	1
Urdu	1
English	2 (sometimes)

% of time of usage?

100% of time	1
Most of the time	5

d) Do you encourage your child to speak (mother language)

at home?

Yes	6
Most of the time	1

outside the home?

With relatives	2
friends	1
No	3

e) Do you provide your child with lessons in (mother language) ?

Yes	0
No	6

f) Does your child attend activities on (mother) culture?

Yes	1
No	5

g) How often does your child attend these activities?

once a week	0
once a month	0
other--4 or 5 times a year	1

3. Do you wish your child to complete High School?

Yes	6
No	0

4. a) Do you wish your child to go on to:

University	5
NAIT	1
Learn a trade	2
Other	0

b) Do you think your child will go to (4a) ?

Yes	1
No	0
Don't know	5